CONTENTS OF SUPPLEMENT.

PERSONAL 113
Obituary 113
ENGINEERING SOCIETIES 113
Coming Meetings 113
TRADE PUBLICATIONS 113
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 113
Railways 114
Street and Electric Railways 114
Light, Heat and Power Plants 115
Bridges 115
Buildings 116
Water-Works 117
Sewerage 118
Garbage Disposal and Street Cleaning 118
Streets and Roads 118
Manufacturing Plants 119
Miscellaneous Contracts 119
Foreign Contracts and Export News 119
Contract Prices 120
INDUSTRIAL NOTES 120

PERSONAL.

Mr. J. J. Van Valkenburgh has been appointed Town Engineer of South Framingham, Mass.

Mr. P. B. Bloomfield, Civil Engineer, of Union City, Pa., and Miss Laura Mitchell, of Listonburg, were married March 16.

Mr. J. B. Girand, Civil and Mining Engineer, has opened an office in the Prescott National Bank Building, Prescott, Ariz.

Mr. R. L. Hester has been elected Superintendent and Engineer of the water-works and electric light plant of Cuthbert, Ga.

Mr. W. P. Robert, Assistant Naval Constructor, U. S. N., and Miss Bessie Stark, of Brookline, Mass., were married on March 19.

Mr. H. T. Porter, Chief Engineer of the Bessemer & Lake Erie R. R., has removed his headquarters from Pittsburg to Greenville, Pa.

Mr. Edward M. Boggs, M. Am. Soc. C. E., has been appointed Chief Engineer of the Oakland Transit, with headquarters at Oakland, Cal.

Mr. William Trapnell, Assistant Division Engineer on the Baltimore & Ohio R. R., at Cumberland, Md., was married on March 15 to Miss Elizabeth M. Calston.

Mr. Mason L. Brown, Civil Engineer, who was sent to Cuba by the Cuban Colonization Co., of Detroit, Mich., to survey lands near Holquin, has returned to Detroit.

Mr. L. D. Button has been appointed Superintendent of the Blackwell, Enid & Southwestern Ry., succeeding Mr. Robert Holland, Acting Superintendent, with headquarters at Cordell, Okla.

Mr. E. M. Kenly, C. E., has been appointed Superintendent for the Gorman Coal & Coke Co., West End, W. Va., succeeding Mr. Geo. P. King, transferred to the mines on Georges Creek.

Mr. S. E. Coombs, Chief Engineer of the St. Louis, Memphis & Southeastern R. R., with headquarters at Cape Girardeau, Mo., will hereafter have his office at 510 Granite Block, St. Louis, Mo.

Mr. A. E. Boughner has been appointed Assistant Superintendent of the Parsons, Cherokee and Neosho Divisions of the Missouri, Kansas & Texas Ry., and mineral branch, with headquarters at Parsons.

Mr. Edgar H. Berry has resigned his position as Draftsman in charge of the Equipment Department at the Navy Yard, Brooklyn, to enter the employ of the C. W. Hunt Co., West New Brighton, N. Y.

Mr. W. A. Garrett, Superintendent of the New York Division of the Philadelphia & Reading R. R., has been appointed General Superintendent of the system, succeeding Mr. W. G. Besler, resigned.

Mr. W. J. Young has been appointed Chief Engineer of the Lehigh & New England R. R. and Mr. J. Whalen Reiger is appointed Assistant to the General Manager, both having headquarters at Pen Argyl, Pa.

Mr. A. H. Westfall, Assistant General Superintendent of the Elgin, Joliet & Eastern and the Chicago, Lake Shore and Eastern railways, has been appointed General Superintendent, with office at South Chicago, Ill.

Mr. W. W. Cummings has resigned his position with the New England Gas & Coke Co. and the Massachusetts Pipe Line Gas Co., of Everett, Mass., and has opened an office as Consulting and Constructing Engineer at 53 State St., Boston, Mass.

Mr. W. K. Palmer, Consulting Mechanical and Electrical Engineer, 401 N. Y. Life Bldg., Kansas City, Mo., has been appointed as Consulting Engineer for the Kansas City & Olathe Electric Ry., extending from Kansas City to Olathe, Kan.

Mr. Francis L. Pruyn, Associate M. Am. Soc. C. E., has resigned his position as Assistant Engineer of the New East River Bridge, in charge of the construction on the Brooklyn side, to become Treasurer of the United Engineering & Construction Co.

Mr. W. L. Glazier, Civil Engineer, was appointed Superintendent of the Water-Works Department of Newport, Ky., on March 15, succeeding Mr. Horning, resigned. Mr. Glazier is Superintendent of Public Works, and was for five years City Engineer of Newport.

Mr. George A. Ricker, who, with Mr. William A. Haven, M. Am. Soc. C. E., was reported in our issue of March 20 to have been elected a Member of the Institute of Civil Engineers of Chili, is a Member of the American Society of Civil Engineers and Past-President of the Engineers' Society of Western New York, of which Mr. Haven is now President.

Mr. Carl O. Bostrom, of the Osborn Engineering Co., Cleveland, O., was awarded the Macdonald Prize for the best thesis of the class of 1901 in the Rensselaer Polytechnic Institute, Troy, N. Y., and not the Rochester Polytechnic Institute, as recently stated.

Mr. John G. Trimble, of the firm of Trimble & Miller, Civil Engineers, has been appointed by Mr. J. Guy McCandless, Director of the Department of Public Works of Pittsburg, Pa., to be Engineer in charge of the completion of the work on Highland reservoir No. 2.

Mr. Harry H. Rankin has resigned his position as Civil Engineer at the Duquesne Steel Works plant of the Carnegie Steel Co., to take effect April 1, in order to enter the firm of Rankin & Hengst, Civil Engineers, with offices in the Marine National Bank Building, 301 Smithfield St., Pittsburg, Pa.

Mr. W. S. Besler, General Superintendent of the Philadelphia & Reading Ry. since September, 1900, has resigned that position to become General Manager of the Central R. R. of New Jersey. Mr. Besler was born in 1864, and entered the employ of the Chicago, Burlington & Quincy R. R. in 1881. Five years later he entered the Massachusetts Institute of Technology, taking up special work. He re-entered the service of that company in 1888, and later built a branch road for the company. For six years he was Superintendent of that company's St. Louis lines.

OBITUARY.

Mr. Nelson M. Beach, Treasurer and General Manager of the Bridgeport Brass Co., died suddenly at his home in Bridgeport, Conn., on March 19.

Mr. Elias F. Gobel, contractor, died at his home in Chicago on March 21, aged 68 years. Mr. Gobel was identified with many important engineering enterprises, including the first lake crib for Chicago's water supply.

Mr. John Ryan, contractor, of Toronto, Ont., died recently. He figured in the construction of the Grand Trunk, Chicago & Alton, Intercolonial, Ontario & Quebec and the Brookville railways, and of late he had been associated with M. J. Hanly in the construction of the "Soo" Canal and the enlargement of the St. Lawrence Canal. He was born in Ireland.

Mr. Bryan Donkin, an English Engineer of wide reputation in the field of thermo-dynamics, died at Brussels on March 4. Mr. Donkin was born in 1835 at Bermondsey, England; was educated at University College, London, and at the Ecole Centrale des Arts Metiers in Paris, and he was then apprenticed in the establishment founded by his grandfather, Bryan Donkin, F. R. S. In 1868 he was made a partner in this engineering firm. The younger Bryan Donkin early began the study of practical thermodynamics; and to him is given the whole credit for proving that heat is converted into work by the steam engine; in this work he was assisted by Mr. Farey; but the experimental demonstration was in the main due to Donkin. He recently took up the investigation of the gas engine. Mr. Donkin was a Member of the Institution of Civil Engineers; Vice-President of the Institution of Mechanical Engineers, a member of the Royal Institution and of several foreign societies.

ENGINEERING SOCIETIES.

COMING MEETINGS.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
May 20. Annual convention at Washington, D. C. Secy., C. W. Hunt, 220 W. 57th St., New York.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 27. Semi-annual meeting at Boston. Secy., F. R. Hutton, 12 W. 31st St., New York.

NEW YORK RAILROAD CLUB.—At the meeting of March 20 a paper was read on the subject "Some Principles of Railway Regulation," by Mr. H. T. Newcomb, Editor of the "Railway World." An interesting though short discussion called attention to necessary modifications of some of the statements contained in the paper. The request from the Master Car Builders' Association as to suggestions for amendment of the rules of interchange, and the same society's request for suggestions as to the proper mode of attaching cards to steel cars were discussed and acted upon by the club. At the April meeting a paper will be read by Mr. E. E. Russell Tratman, Associate Editor of Engineering News, on the subject "Heavy Freight Traffic; Its Relation to Roadbed and Trackwork."

WESTERN SOCIETY OF ENGINEERS.—At the meeting on March 19 Mr. F. R. Still, of the American Blower Co., read a paper on "Mechanical Draft," describing the use of fans and short chimneys in place of tall and expensive chimneys, and also discussing the theoretical efficiency of mechanical and natural draft and the economy of the former where a chimney furnishes all the draft required and a fuel economizer is not used. The power expended in driving a fan rarely exceeds, and is usually below, 2% of the steaming capacity of the plant. Overhung fans were considered preferable to those on long shafts. In comparing forced draft with induced draft, he considered the latter as the ideal system for stationary boiler plants having automatic stokers. Mr. Rogers, of the B. F. Sturtevant Co., discussed the subject at some length in regard to the boiler plants of office buildings, etc. Mr. George A. Damon described the mechanical draft plant at the power station of an interurban electric railway in Michigan. Mr. B. J. Arnold remarked that it was often asked why the great power plants of city electric railway and lighting stations were not fitted with mechanical draft instead of their tall and expensive chimneys for natural draft, but in many cities a certain height is specified by ordinances in order to prevent nuisance from the smoke and gases.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

OIL BURNER.—American Crude Oil Burner Co., San Francisco, Cal. Paper; 4¾ x 6¾ ins.; pp. 16; illustrated.

This pamphlet contains instructions as to the proper arrangement of furnaces, etc., for burning crude oil. It also describes the American burner, and shows power plant and a locomotive on which the burner is used.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened	Work.	Place.	See Eng. News.
Mar. 27.	Bascule bridge,	Buffalo, N. Y.	Feb. 27
	Advertised, Eng. News, Feb. 27 and Mar. 6.		
Mar. 27.	Paving, etc.,	Rye, N. Y.	Mar. 20
Mar. 28.	Roadway,	Alexandria, Ind.	Mar. 13
	Advertised, Eng. News, Mar. 13 and 20.		
Mar. 28.	Sewerage system,	Newberry, S. C.	Mar. 13
	Advertised, Eng. News, Mar. 13 and 20.		
Mar. 28.	Paving,	Grand Rapids, Mich.	Mar. 27
Mar. 28.	Storm sewer,	Freeport, Ill.	Mar. 27
Mar. 28.	Steel bridge,	Cohocton, N. Y.	Mar. 27
Mar. 28.	Bridge,	Mansfield, Ill.	Mar. 27
Mar. 28.	Bridge bonds,	Columbus, O.	Mar. 27
Mar. 29.	Bridges,	Tillamook, Ore.	Mar. 27
Mar. 29.	Sewer,	Racine, Wis.	Mar. 27
Mar. 29.	Sewer,	Findlay, O.	Mar. 27
Mar. 29.	Water-works bonds,	Pleasantville, O.	Mar. 13
Mar. 29.	St improvement bonds,	Spartanburg, S. C.	Jan. 23
Mar. 29.	Bridge superstructure,	Winnipeg, Man.	Mar. 20
	Advertised, Engineering News, March 20.		
Mar. 31.	Bridge,	Sydney, N. S. W.	Jan. 16
	Advertised, Eng. News, June 20 to July 11, '01.		
Mar. 31.	Pipe, castings, valves, etc.,	Hawaii	Feb. 20
	Advertised, Eng. News, Feb. 20 to Mar. 20.		
Mar. 31.	Electric light franchise,	Edwardsville, Ill.	Feb. 27
Mar. 31.	Lime (6,400 bbls.)	New York, N. Y.	Feb. 27
Mar. 31.	Cement and broken stone,	New York	Mar. 6
	Advertised, Eng. News, Mar. 6 to April 3.		
Mar. 31.	Water-works,	Latimer, Ia.	Mar. 20
Mar. 31.	Brick sewer,	Toledo, O.	Mar. 20
Mar. 31.	School Pocahontas,	Ia.	Mar. 20
Mar. 31.	Jail,	New Orleans, La.	Mar. 13
Mar. 31.	Sewers,	Niagara Falls, Can.	Mar. 27
Mar. 31.	Dredging,	East Rockaway, L. I.	Mar. 27
Mar. 31.	Steel pier,	Palm Beach, Fla.	Mar. 27
Apr. 1.	Paving repair,	Toronto, Ont.	Mar. 27
Apr. 1.	Paving,	Traverse City, Mich.	Mar. 27
Apr. 1.	Drainage bonds,	Waterbury, Conn.	Mag. 6
Apr. 1.	School,	Bessemer, Ala.	Mar. 6
Apr. 1.	Water-works,	Calumet, Mich.	Dec. 26
Apr. 1.	Buildings,	Allegheny, Pa.	Jan. 23
Apr. 1.	Bridge lumber and hrdwre,	Olivet, S. Dak.	Feb. 6
Apr. 1.	Building,	Warren, O.	Feb. 6
Apr. 1.	Court house, etc.,	Indianapolis, Ind.	Feb. 27
Apr. 1.	Road building,	West Boylston, Mass.	Mar. 13
	Advertised, Eng. News, March 13 to April 3.		
Apr. 1.	Paving,	Elizabeth, N. J.	Mar. 13
Apr. 1.	Street improvements,	Cincinnati, O.	Mar. 13
Apr. 1.	Brick or asph. paving,	Traverse City, Mich.	Mar. 13
Apr. 1.	Water mains (10,000 ft.),	Boston, Mass.	Mar. 13
	Advertised, Eng. News, March 13 to 27.		
Apr. 1.	Water-works,	Pittsburg, Tex.	Mar. 20
Apr. 1.	Street improvements,	La Crosse, Wis.	Mar. 20
Apr. 1.	School,	Bloomington, Ind.	Mar. 20
Apr. 1.	Pike roads,	Spencer, Ind.	Mar. 20
Apr. 1.	Ordnance workshop,	Willetts Point, N. Y.	Mar. 20
	Advertised, Eng. News, March 20 and 27.		
Apr. 2.	Water-works,	Matawan, N. J.	Mar. 20
	Advertised, Engineering News, March 20.		
Apr. 2.	Sewer work,	New York, N. Y.	Mar. 20
Apr. 2.	Street work,	Bellefontaine, O.	Mar. 20
Apr. 2.	Street paving,	Mankato, Minn.	Mar. 20
Apr 2.	Paving and curbing,	Cohoes, N. Y.	Mar. 13
	Advertised, Engineering News, Mar. 13.		
Apr. 2.	Drains,	Seaforth, Ont.	Mar. 13
Apr. 2.	Court house and jail,	Shelburne, N. S.	Mar. 6
Apr. 2.	Harnessing water power,	Chicago, Ill.	Feb. 6
Apr. 2.	Bridge work,	Albany, N. Y.	Mar. 27
Apr. 2.	Pine timber,	Chicago, Ill.	Mar. 27
Apr. 3.	Brick sewer,	Newark, N. J.	Mar. 27
	Advertised, Engineering News, Mar. 27.		
Apr. 3.	Sewers,	Long Island City, N. Y.	Mar. 27
Apr. 3.	Pumps, boilers, etc.,	Allegheny, Pa.	Mar. 27
Apr. 3.	Paving,	Fort Wayne, Ind.	Mar. 27
Apr. 3.	Sewer work,	New York, N. Y.	Mar. 20
Apr. 3.	Mechanical filter,	Biloxi, Miss.	Mar. 20
Apr. 3.	Sewers,	Cleveland, O.	Mar. 20
Apr. 3.	Road construction,	Napoleon, O.	Mar. 20
Apr. 4.	Paving,	Toledo, O.	Mar. 20
Apr. 4.	Storehouse,	Vancouver Barracks, Wash.	Mar. 13
Apr. 4.	Grading, etc., (w.-wks.),	Cincinnati, O.	Mar. 13
Apr. 4.	Bridge work,	Columbus, O.	Mar. 27
Apr. 4.	Water-works,	New Glarus, Wis.	Mar. 27
	Advertised, Engineering News, Mar. 27.		
Apr. 5.	Paving, etc.,	Wyoming, O.	Mar. 27
Apr. 5.	Water pipe, castings, etc.,	Everett, Mass.	Mar. 27
	Advertised, Engineering News, Mar. 27.		
Apr. 5.	Cofferdam, etc.,	Washington, D. C.	Mar. 13
	Advertised, Engineering News, Mar. 13.		
Apr. 5.	Macadam road,	New Bedford, Mass.	Mar. 13
Apr. 5.	School,	Taylor, N. Dak.	Mar. 20
Apr. 7.	Dredging,	Philadelphia, Pa.	Mar. 13
Apr. 7.	Sewers,	Canonsburg, Pa.	Mar. 13
	Advertised, Eng. News, Mar. 13 to April 3.		
Apr. 7.	Power plant,	New Orleans, La.	Feb. 27
	Advertised, Eng. News, Feb. 27 and Mar. 6.		
Apr. 7.	Bridge,	Stevenson, Wash.	Feb. 6
Apr. 7.	Water mains (78 tons),	Wellsville, O.	Mar. 20
Apr. 7.	Court house,	Ruston, La.	Mar. 20
Apr. 7.	Viaduct,	Atlanta, Ga.	Mar. 20
Apr. 7.	Graveling roads,	Marion, Ala.	Mar. 20
Apr. 7.	Sewage disposal plant,	Camden, N. J.	Mar. 20
	Advertised, Eng. News, March 20 and 27.		
Apr. 7.	Wharf, etc.,	Jackson Barracks, La.	Mar. 20
Apr. 7.	Electric lighting,	Montgomery, Ala.	Mar. 20
Apr. 7.	Heating, plumbing, etc.,	Raymond, Miss.	Mar. 20
Apr. 7.	Repair shop,	Newport, R. I.	Mar. 27
Apr. 7.	Court house,	Alexandria, La.	Mar. 27
Apr. 7.	Welsbach lighting,	Wichita, Kan.	Mar. 27
Apr. 7.	Sewer,	Ashland, Ky.	Mar. 27
Apr. 7.	County bridge,	Ogden, Utah.	Mar. 27
Apr. 7.	County bridges,	Sherbrooke, N. Dak.	Mar. 27
Apr. 7.	Collecting garbage,	Chicopee, Mass.	Mar. 27
Apr. 8.	Bridge,	Washburn, N. Dak.	Mar. 27
Apr. 8.	County bridges,	Crawfordsville, Ind.	Mar. 27
Apr. 8.	Steel bridges,	Burlington, Kan.	Mar. 27
Apr. 8.	Addressograph,	Cleveland, O.	Mar. 27
	Advertised, Engineering News, Mar. 27.		
Apr. 8.	Sewerage system,	Greenwood, S. C.	Mar. 27
Apr. 8.	Pipe, hydrants, etc.,	Milwaukee, Wis.	Mar. 27
Apr. 8.	Hotel,	Richmond, Va.	Mar. 27
Apr. 8.	Water bonds, etc.,	Springfield, O.	Mar. 20
Apr. 8.	Hospital building,	Washington, D. C.	Mar. 13
Apr. 9.	Water softening plant,	Hackney, Eng.	Mar. 13
Apr. 9.	County bridges,	Columbus, O.	Mar. 20
Apr. 9.	Court house,	Lancaster, Wis.	Mar. 27
Apr. 9.	Bridge work,	Lafayette, Ind.	Mar. 27

Apr. 10. Paving, etc., Madison, Wis. .....Mar. 27
Apr. 10. Bridge substructure, Toledo, O. .....Mar. 27
Advertised, Engineering News, Mar. 27.
Apr. 10. School, Heron Lake, Minn. .....Mar. 27
Apr. 10. Church, Heron Lake, Minn. .....Mar. 20
Apr. 10. Electric plant, Somerset, O. .....Mar. 20
Apr. 11. Court house, Vinton, Ia. .....Mar. 13
Apr. 11. Pier work, Fort Sheridan, Ill. .....Mar. 20
Apr. 12. Vitrified brick sewer, Plattsburg, N. Y. .....Mar. 20
Advertised, Engineering News, March 20.
Apr. 12. Sidewalks, Mansfield, O. .....Mar. 20
Apr. 12. Church, Fernando, Minn. .....Mar. 13
Apr. 12. Buildings (3), Harrisburg, Pa. .....Mar. 27
Apr. 12. Swing pier, Bay City, Mich. .....Mar. 27
Apr. 13. Water-works, Rosedale, Miss. .....Mar. 27
Advertised, Eng. News, Mar. 27 and Apr. 3.
Apr. 14. Street improvement, Cincinnati, O. .....Mar. 27
Apr. 14. Street improvements, Toledo, O. .....Mar. 27
Apr. 14. Hospital, Winnipeg, Man. .....Mar. 27
Apr. 14. Rails and fish plates, Victoria, Australia..Feb. 6
Apr. 14. Refrigerating plants, St. Louis, Mo. .....Mar. 20
Advertised, Engineering News, March 20.
Apr. 14. Removing wreck, Galveston, Tex. .....Mar. 20
Advertised Eng. News, Mar. 20 to Apr. 17.
Apr. 15. W.-wrks, and sewers, Bridgewater, N.S...Mar. 20
Apr. 15. Heating apparatus, Hot Springs, Ark. .....Mar. 20
Apr. 15. Court house, Orange City, Ia. .....Mar. 13
Apr. 15. Jail, Marietta, Ga. .....Mar. 13
Apr. 15. Water-works, etc., Jennings, La. .....Mar. 27
Apr. 15. Water mains, etc., Boston, Mass. .....Mar. 27
Advertised, Engineering News, Mar. 27.
Apr. 15. Garbage disposal, Brooklyn, N. Y. .....Mar. 27
Advertised, Eng. News, Mar. 27 to April 10.
No date. Artesian well, Chadwick, N. J. .....Mar. 27
Advertised, Engineering News, Mar. 27.

RAILWAYS.

BALTIMORE & OHIO.—Improvements are reported to have been ordered by this company in Berkeley county, W. Va. The improvements will include the construction of 10 miles of new road. The road will continue down the river from Cherry Run to the vicinity of Little Georgetown, where a line to the right will be made and the line run to the old roadbed near Tabbs Station, about five miles west of Martinsburg. The object of the new line will be to avoid the North Mountain grade. The new route will be used for freight traffic.

BARBERTON, AKRON & EASTERN BELT LINE.—John C. Carland, contractor, Toledo, O., has been awarded a contract for the construction of this line. He will do the grading for 14 miles.

BLACKWELL, ENID & SOUTHWESTERN.—Engineers are now at work in Lubbock county, Tex., locating the line of the proposed extension toward El Paso, Tex. The road was recently acquired by the St. Louis & San Francisco interests, and is rapidly being extended to Vernon, Tex. It is proposed to build the line as rapidly as possible. The distance between Lubbock, Tex., to Vernon, is 150 miles, and between that point and El Paso 450 miles. The preliminary survey between Lubbock and Vernon has been made.

CHICAGO, IOWA & DAKOTA.—An extension from Iowa Falls, Ia., to Burt, in Kossuth county, is contemplated, according to reports. The route of the new line will be from Iowa Falls up the Iowa River to Oakland and across to Wall Lake, thence north to Clarion and to Burt. H. C. Stuart, Gen. Mgr., Eldora, Ia.

DAKOTA EASTERN.—L. D. Lyon, Secy. Watertown, S. Dak., writes that arrangements are now being made for financing the road. The company was recently organized to build a line from Watertown to Sioux Falls and Aberdeen, S. Dak., and also a line from the first-named place to Fargo, having a total length of 350 miles. John W Marbin, Pres., Watertown. The chief engineer has not been selected.

DALLAS TERMINAL R. R.—W. C. Connor, Pres., Dallas, Tex., has announced that arrangements are being made for beginning the work of grading and track laying in the city of Dallas.

DULUTH & NORTHERN MINNESOTA.—This company has asked for an increase of its capital stock from $200,000 to $1,000,000, for the purpose of building the extension, giving the company entrance into Duluth, Minn., over its own tracks. At present the road connects with the Duluth & Iron Range at Knife River, and uses the latter's tracks into Duluth.

EASTERN OKLAHOMA.—Surveys have been made, rights of way secured and contracts let for grading this line. Most of the materials are now on hand. The length of the line will be about 200 miles. It will run from Newkirk to Ralston, Cushing, Davenport, Clifton, Shawnee, Tecumseh, Wanette, Okla., and Johnson to Pauls Valley, Ind. Ter. E P. Ripley, Pres.; James Dun, Ch. Engr., Chicago.

GRAND RAPIDS & CHICAGO.—Articles of association have been filed by this company at Lansing, Mich., with a capital stock of $1,000,000. The line will pass through the counties of Kent, Allegan, Van Buren, Berrien and Kalamazoo, Mich., having a length of 125 miles.

GRAND TRUNK.—The Flick & Johnson Construction Co., Davenport, Ia., have received a contract for 50 miles of second track work on the company's Chicago-Detroit line. The estimated cost of the work is $350,000.

HOUSTON & TEXAS CENTRAL.—A surveying party is now in the field running a preliminary line from Navasota to Anderson, Tex., 13 miles, thence to Madisonville, 46 miles. It is not yet known whether the company will build this much-talked-of branch. It is reported that another party is in the field at Hempstead on preliminary work. The southern terminus will be at Hempstead, Bryan or Navasota.

INTERNATIONAL & GREAT NORTHERN.—The company has announced that it will positively build the extension to Dallas from a point on its Ft. Worth Division; also to Madisonville from Navasota and to Beaumont and Orange from either Houston or Spring. Another important extension contemplated by the company is the continuance of the Beaumont line into Louisiana, with New Orleans as the terminus, or to a connection with the Texas & Pacific. Preliminary surveys for that projected line have been arranged by way of Beaumont and Orange from Houston. The right of way for the branch line from Navasota to Madisonville has already been secured and contracts signed for building the line. Leroy Trice, Gen. Mgr., Austin, Tex.

IOWA & ST. LOUIS.—Wm. M. Kenefick, Kansas City, Mo., has secured the contract for the construction of this road from Elmer, Mo., on the Santa Fe, to a connection with the Iowa Central Ry. near Centerville, Ia., and the Chicago & Northwestern near Buxton, Ia. The distance is about 50 miles and the cost of the work will be nearly $1,000,000. The contract calls for the completion of the line not later than Aug. 1.

JONESBORO, NEWPORT & WESTERN.—Articles of incorporation have been filed by this company in Arkansas, with a capital stock of $200,000. It is proposed to build a line of railway from the Union Depot, Jonesboro, Ark., in a westerly direction through the counties of Craighead, Poinsett and Jackson to a point where the levee touches the White and Black River Valley division of the Choctaw, Oklahoma & Gulf R. R., thence to Newport and across the Iron Mountain to White River, a distance of 40 miles. G. W. Culberhouse, Jonesboro; Robt. L. Stearns, Ludington, Mich., and J. J. Mardis, Harrisburg, Ark.

LEHIGH & NEW ENGLAND.—Bids are wanted by this company, W. J. Young, Ch. Engr., Pen Argyl, Pa., until April 12 for grading five miles of road near Easton, Pa. Plans are being prepared for a bridge over the Delaware River in connection with the new line. The road will be known as the Northampton R. R.

LIGONIER VALLEY R. R.—It is reported that this line will be extended from Ligonier, Pa., to the coal fields north of that place. Geo. Senft, Gen. Mgr., Ligonier.

LONG BRANCH R. R.—Dunn & Lallande, Birmingham, Ala., were the successful bidders for the contract for constructing this line, which is to be a branch of the Birmingham Mineral, from Dale, Blount county, Ala., to the coal lands recently purchased by the Lehigh Coal & Coke Co. The road, with a switch, will be eight miles long and will cost when completed about $100,000. Work will be started at once and will be completed within six months.

LONG ISLAND R. R.—The officials of this company have gone over the route of the proposed extension of the Wading River branch of this road in Long Island, New York. The extension will run from Wading River to Riverhead, about 10 miles distant. There will be no engineering difficulties met with in the construction. W. F. Potter, Gen. Supt., Long Island City, N. Y.

LOUISIANA.—E. V. Babcock, Pres. Babcock Lumber Co., Johnstown, Pa., has recently been in consultation with the directors of the Avoyelles Lumber Co., Avoyelles county, La., regarding the construction of an 18-mile railway through the timber lands of the company from Marksville to the Red River. The Avoyelles Lumber Co. has decided to build this line and to erect a plant at the Red River terminus. Its holdings amount to about 109,000 acres of land. Mr. Babcock is interested.

MARYLAND PENINSULA.—A bill has been introduced in the Maryland legislature providing for the incorporation of this company, which proposes to construct a road from Baltimore to Cecil county, thence to Crisfield, on the Eastern Shore. Work is to be begun in five years and completed in ten years. The capital stock is $100,000. Chas. B. Greenwell, W. S. Byles and Nicholas S. Collohan are incorporators.

METHOW RY. & SMELTING CO.—The surveying party has begun work on this line and will be continued through the summer. In addition to building a railway, the company plans to erect a smelter at the mouth of the Methow River, to have a capacity of 500 tons a day.

MISSOURI, KANSAS & TEXAS R. R. OF TEXAS.—A correspondent sends us the following information: It is reported on reliable authority that this company contemplates doing considerable work in Eastern Texas.

NEW YORK, TEXAS & MEXICAN.—An extension of the Wharton branch of this road is in prospect. D. T. Forbes, Vice-Pres. and Gen. Supt., Victoria, Tex.

ROCK ISLAND & PEORIA.—Improvements on this line between Cambridge and Ulah, Ill., a distance of 2½ miles. The improvements will comprise grade reductions and the straightening of the track. H. S. Cable, Vice-Pres., Rock Island, Ill.

ST. LAWRENCE & MEGANTIC.—Application is being made by this company for a charter to construct a railway from a point on the St. Lawrence River, between the River Becancour and the Grande River Duchene, to a point at the head of Lake Megantic, in the vicinity of the boundary line between Canada and the United States; also, a branch running eastward from a point near the mouth of the Famine River, to a point on the Quebec & New Brunswick Ry., in Garneau township. The capitalization will be $1,000,000. Roger Larne, Quebec, Que.; Taschereau Fortier, St. Français, and Eusebe Huard and Chas. A. Leger, Lake Megantic, are promoters.

SANTA FE CENTRAL.—The contract for building this line has been awarded to the Pittsburg Construction Co., which firm agrees to have the road finished by Oct. 1. The line is backed by Pittsburg, Pa., capitalists, and will reach gold and copper properties and extensive coal lands in the region of Santa Fe, N. Mex., to Albuquerque and run thence to Torrence, having a length of 174 miles.

SEABOARD AIR LINE.—The report in our issue of March 20, stating that this company had purchased the Gladeville R. R. and the Jaeger & Southern road, and that an extension would be built connecting with the main line, was taken from a Southern paper, and has since been denied by John E. Williams, Pres.

SOUTHERN INDIANA RY.—F. W. Ranno, Ch. Engr. M. W., Bedford, Ind., writes as follows regarding the work to be done by the company's forces the coming season: "It is expected that the Sullivan branch, which is to run from Latta to Sullivan, Ind., a distance of 15 miles, is to be completed. About 4¾ miles of the above was built in 1901. The Hymera branch is to begin one mile south of Lewis, Ind., and run southwest through Hymera to a junction with the Sullivan branch, a distance of 9½ miles. In addition, two or three coal spurs to various coal mines will probably be built. All work is to be done by the railway company's force."

SOUTHERN PACIFIC.—McShane, Elmere & Co. Omaha, Neb., have secured the contract for grading and constructing 10 miles of road for this company near Fenlon, Nev. About 200 men will be put on the work by the contractors at an early date. Other contracts for work in Nevada are reported to have been let as follows: For a line from Palisade to Mollen, approximating 8¾ miles, to Streeter, Lusk, Dittmeo & Co., Ellsworth Bldg., Chicago; from Golconda to Iron Point, 10 miles, and from Beowawe to Gerald, nine miles, Robt. Sherer & Co., Los Angeles, Cal.; from Iron Point to Stone House, 16 miles, Grant Bros., Los Angeles; Clark to Beowawe, 15 miles, Kilpatrick Bros. & Collins.

SOUTH SHORE RY.—Bids are wanted by this company, with offices at 26 St. Sacrament St., Montreal, Que., until March 29 for the construction of the line from St. Gregoire, in the county of Nicolet, to a point east or west of Chaudiere River, in the county of Levis, a distance of 70 miles. H. A. Hodge, Pres.

TENNESSEE CENTRAL.—Chief Engineer Bottiger has put engineers in the field to resurvey the line between Monticello, Ill., and Clarksville. The grade will be under 3%.

TRANS-CANADA.—This company has been organized with a capital stock of $20,000,000. It is formed for the purpose of building a line from Quebec to the Pacific via James' Bay.

TULSA NORTHERN.—This company has been incorporated in Texas, with a capital stock of $500,000, to build a line from Tulsa, in the Creek Nation, to Owasse, in the Cherokee Nation, a distance of 10 miles. The places of business will be Guthrie and Tulsa. F. H. McGuire and Thos. P. Hewitt, Guthrie, and Edward Short, Tulsa, are incorporators.

UNION STOCK YARDS CO.—The directors of this company have authorized the expenditure of about $20,000 to be used in replacing the 60-lb. rails of the company's line with 80-lb. rails.

WHITE RIVER R. R.—J. C. Yancey, Batesville, Ark., one of the promoters of this road, a branch of the Iron Mountain R. R., is reported to have stated that 20 miles of the system have been completed and that the grading, clearing of right of way and other work incident to the construction of 60 additional miles are being pushed forward by a force of 3,000 men. The line will be extended to Buffalo City, and it is expected that the work will be completed by Sept. 1. The company expects to further extend the line to Carthage or Webb City, Mo., and to complete this latter extension within a year after Buffalo City has been reached. The White River line from Batesville to Buffalo City will open a region rich in minerals and one admirably adapted to fruit raising and farming.

STREET AND ELECTRIC RAILWAYS.

BIDDEFORD, ME.—Chas. E. Atwood, one of the promoters of the proposed electric railway to the Pool, has engaged the firm of Lilsley & Cummings, Civil Engineers, to make the survey for the line. The Biddeford Pool Electric Ry., recently incorporated, will build the line.

GREENVILLE, ME.—F. M. Macfarlane, of this place, proposes to construct three miles of electric road from his veneering manufactory in Squaw Mountain township to Greenville; capital stock, $25,000.

WESTBORO, MASS.—Ground has been broken for the new carbarn and subpower station to be erected by the Boston & Worcester St. Ry. at the south side of Belmont and Otis Sts. The building will be 224 x 74 ft., of brick and steel construction, steam heated, having a capacity of 50 cars. It will cost about $35,000. E. H Kitfield, Arch., State St., Boston, has plans for the building.

WORCESTER, MASS.—The directors of the Worcester & Holden St. Ry. Co. have decided to build a line of railway connecting the towns of Holden and Jefferson, and will shortly let contracts for the work.

DANBURY, CONN.—The Danbury & Harlem St. Ry. Co., which is building a line between Danbury, Conn., and Golden's Bridge, N. Y., will resume operations as soon as the ground softens. Geo. W. Nock, Gen. Mgr.

COOPERSTOWN, N. Y.—The officers of the Oneonta, Cooperstown & Richfield Springs Ry. will meet on March 27 for the purpose of voting on a proposition of increasing the capital stock from $1,000,000 to $1,500,000 to provide for the extension from Richfield Springs to Mohawk. H. T. Jennings, Vice-Pres. and Gen. Mgr.

JOHNSTOWN, N. Y.—The Fonda, Johnstown & Gloversville R. R. is applying to the state railroad commission for power to raise $1,000,000 in mortgaging its Cayadutta electric division for the purpose of extending it to Amsterdam. Work will commence this spring. J. N. Shannahan, Engr., Gloversville.

NEW YORK, N. Y.—The matter of the equipment of the Rapid Transit Tunnel R. R. will be taken up by the officers at an early date. These officers will soon make a trip through the west for the purpose of inspecting of latest electrical devices. E. P. Bryan, Gen. Mgr., has estimated the cost of equipping the tunnel at $15,000,000. The rapid progress in the work of construction will necessitate the immediate investigation of this work.—The state board of railroad commissioners has approved the application of the Metropolitan St. Ry. for power to issue bonds to the amount of $65,000,000, of which $11,000,000 will be used for equipping its lines now propelled by horse power with underground electricity.

ROCHESTER, N. Y.—T. J. Nicholl, Gen. Mgr. Rochester Ry. Co., states the company will extend its line to Manitou Beach this summer. The line will parallel the present Charlotte & Manitou Beach line.

SYRACUSE, N. Y.—Application has been made by the Interurban R. R. to increase the capital stock from $250,000 to $1,000,000. It is understood that the additional capital will be used for improvements on the line now in operation between Auburn and Skaneateles. Thos. H. Mather, Engr.—E. G. Connette, Gen. Mgr. Syracuse Rapid Transit Ry. Co., is reported to have announced that during the coming summer the Valley line will be double tracked between switches Nos. 1 and 2, a distance of 1,800 ft.

WARRENSBURG, N. Y.—The directors of the Hudson Valley Ry. Co. at a recent meeting decided to build several branch lines. No immediate construction is contemplated.

JERSEY CITY, N. J.—The site for the erection of a plant to supply the power for the trolley cars to run through the tunnel to New York city has been bought by the New York & New Jersey R. R. Co. It covers the block bounded by 13th, Provost, 14th and Henderson Sts. —The North Jersey St. Ry. Co. has formulated plans for the improvement of its line to this city.

TRENTON, N. J.—The Hudson River Traction Co., capitalized at $1,100,000, has been incorporated to construct and operate street railways. Samuel B. Lawrence, Henry C. Everdell, New York, and George B. Hanford, East Orange, are incorporators.

DOYLESTOWN, PA.—The borough council has granted the New Hope Ry. Co. the right to use several streets in this town for its tracks. Work will be started as soon as estimates can be received. The road will be 11 miles long, and will connect the borough with the Delaware River opposite Lambertville. Robt. E. Wright, Pres. Philadelphia & Lehigh Valley Traction Co., is said to have interest in the line.

HARRISBURG, PA.—Incorporation papers are reported to have been filed here for a new street railway to be built from Egypt through Ormrod to the Farm and Turf Hotel and there connect with the Slatington line. The line will be five miles long. H. C. Trexler, E. M. Young and J. Marshall Wright, Allentown, are interested.

PITTSBURG, PA.—The Pittsburg, McKeesport & Greensburg St. Ry. Co. is surveying a route for the extension of its line to Trafford Park.

READING, PA.—Application has been made by the Baltimore, Westminster & Gettysburg Electric Ry. for franchises in a number of towns along the route of its proposed line connecting Washington and Reading by way of Gettysburg, Harrisburg and Lebanon.

ROYERSFORD, PA.—The route of the Royersford Electric Ry. between Royersford and Colleysville has practically been determined upon. Work will begin shortly.

BIRMINGHAM, ALA.—Contracts merging the Steel Cities Ry. Co. and the Warrior Power Co. into the Birmingham & Steel Cities Ry. & Power Co. have been concluded. The object of the newly consolidated company will be to build a street car system, for which a franchise was recently granted to J. W. Adams and associates. The company is organized with a capital stock of $2,000,000. R. R. Zell, who is one of the incorporators, has stated that an engineering corps is now in the field locating the line. Surveys for the power plant are already made. The plant will generate electricity to the amount of 4,500 HP. and will have three substations, at Ensley, Pratt City and in Wylam. A 30-ft. dam will be built. The company uses 80-lb. and 70-lb. rails and double track, quadruple-equipped cars.

AKRON, O.—The contract for the construction of the line of the Barberton, Akron & Eastern Belt Line Ry. has been awarded to John C. Carland, of Toledo, and work will begin at once and be completed by July 1. The line to be built at present will be 14 miles long, but the fully completed road will have a length of 22 miles. The contract calls for the grading. Several bridges will be necessary.

FINDLAY, O.—The Findlay, Kenton, Bellefontaine & Urbana Electric Ry. Co. has been incorporated, with a capital stock of $10,000, to build an electric railway from this city through the towns named. W. J. Burket, C. H. Thorndyke and David Joy are interested.

GOSHEN, IND.—James Rothwell, St. Louis, Mo., has closed contracts for most of the rights of way for the Goshen-Wawasee Interurban line, and it is reported that construction will be started at once.

NEW HARMONY, IND.—W. M. Ford, Pres. Evansville & Mt. Vernon Traction Co., New Harmony, informs us that the capital for construction is secured. No surveys have yet been made. The line will be 20 miles long, propelled by electric power.

NORTH MANCHESTER, IND.—The Marion & Goshen St. Ry. Co. has been incorporated to build a line between these points. The capital stock is $10,000. J. W. Dorno, David Ginther and J. W. Strauss are interested.

PONTIAC, MICH.—Reports state that the United Ry. will build a line to Orion and erect a power plant here to do away with the one at Birmingham.

DIXON, ILL.—The preliminary surveys and profiles for the line of the Aurora & De Kalb Traction Co. are completed, and it is announced that the financing of the road has been arranged for and that contracts will be let at an early date. The road will be 27.3 miles long, and will practically be an air line between the points named. W. D. Ball, Elec. Engr., and R. H. Baldwin, Locating Engr., have charge of the preliminary work.

LA CROSSE, WIS.—Joseph Boschert, Pres. La Crosse & Eastern Ry., La Crosse, writes that good progress is being made in securing the rights of way for the company's road and that contracts for the construction will be let within three months. The line will be 35 to 40 miles in length and will touch at La Crosse, Stoddard, Chaseburg, Coon Valley and Viroqua. Electricity will be used as motive power. Geo. Bradish, Ch. Engr.

LA CROSSE, WIS.—The organization of a company to be known as the La Crosse & Black River Falls Electric Ry. is being effected in this city. The new company will be capitalized at $1,000,000. It will build an electric railway from this city to Black River Falls, Wis., by way of Melrose through the north central part of the state. Work will be started this spring and the line is to be finished by the first of next year.

MILWAUKEE, WIS.—The Milwaukee Electric Ry. & Light Co. will build an extension of its Oakland Ave.-Whitefish Bay line from Day Ave., in that village, to Fox Point, 2½ miles distant.

CEDAR RAPIDS, IA.—J. W. Conn, of this place, has informed us that contracts for building the electric line between Cedar Rapids and Morengo, some 30 miles, will be let by May 1 or before. About half of the rights of way has been obtained and a part of the capital is secured. Mr. Conn states that the company is not yet named, and does not mention any others as interested in the proposition.

BUTTE, MONT.—J. R. Wharton, Mgr., has secured the right of way for the Butte Electric Ry. Co.'s line south of the city. Work of construction will begin next month and will be completed by May.

ST. LOUIS, MO.—The Central Belt. Ry. Co. has been reorganized under the name of the St. Louis Belt & Terminal Ry. Co., and has increased the capitalization from $200,000 to $3,000,000. The original corporation was for the purpose of making surveys and other necessary preparations, and the reorganized company do the construction and operation. It is reported that contracts will be let at once, so that the line may be completed within a few months. B. F. Yoakum, Pres. St. Louis & San Francisco Ry.; C. G. Warner, Vice-Pres. Missouri Pacific R. R.; B. L. Winchell, Vice-Pres. and Gen. Mgr. St. Louis & San Francisco Ry., and a number of other prominent railway officials are interested.

HOT SPRINGS, ARK.—The Interurban Ry. & Power Co. of Hot Springs has been incorporated with a capital stock of $500,000. It is the purpose of the company to build an electric road between Hot Springs and adjacent cities and towns. Chas. B. Eames, Pres., St. Louis.

DENVER, COLO.—It is stated in local papers that the Denver & Northwestern Electric Ry., which at present runs from Berkeley to Arvada, has advertised for bids for constructing 10 miles of grade west from Arvada. The work is to be started soon after April 2 and to be completed within 60 days. The division will extend from Arvada northwest to Coal Creek. Rails are now being ordered. Wm. G. Smith, Vice-Pres.

SEATTLE, WASH.—The Seattle Electric Co. has been granted five franchises by the council, four of which will be for extension of the street car divisions.

LIGHT, HEAT AND POWER PLANTS.

MIDDLESEX, VT.—Reports state that a new dam will be built to take the place of the Viles dam, at a cost of about $20,000. E. C. Waite, of White River Junction, Vt., is interested.

PEABODY, MASS.—This town has appropriated $9,000 for an electric plant and $10,500 for water-works purposes.

BINGHAMTON, N. Y.—Messrs. S. D. Kane, Sands and Buckley have been granted a franchise for a plant to be built by the Binghamton Light, Heat & Power Co., and, it is stated, will soon begin the construction of the plant.

FULTON, N. Y.—The North American Co., of Cincinnati, O., has purchased the electric plant franchises, and will at once make improvements to the plants of the Fulton Electric Light Co.——The Fulton Light, Heat & Power Co. has been incorporated to furnish light, heat and power to Fulton, Oswego, Syracuse, Phoenix, Camillus, Clay, Cicero, Elbridge, Geddes, Lysander, Salina, Van Buren, Solvay, Baldwinsville, Jordan, Liverpool, Memphis and Warner.

GLENS FALLS, N. Y.—The Hudson River Electric Co. is arranging to build a new power plant about five miles above here. E. L. Ashley, Pres.

HOLLY, N. Y.—This town will soon vote on the proposition to build an electric plant.

HOMER, N. Y.—An election will be held April 1 to vote on the question of issuing $30,000 in bonds for an electric plant. J. W. Fassett, Chn. Trustees; F. M. Briggs, Secy.

ISLIP, (L. I.), N. Y.—Geo. B. Howell, Harry Bunce and Richard Allchin have been granted a franchise for an electric plant.

NEW YORK, N. Y.—The bureau of yards and docks, Navy Dept., Washington, received the following bids March 22 for an electric generator for the navy yard, New York: Bullock Electric Mfg. Co., Cincinnati, O., $19,220; General Electric Co., Schenectady, N. Y., $18,067 and $18,640; Thresher Electric Co., 120 Liberty St., New York, $16,270; C. F. Wood, 1 Madison Ave., New York, $16,700.

NIAGARA FALLS, N. Y.—The Lower River Power Co. has been organized to build a power plant for the residence section of this city.

RIVERSIDE, N. Y.—John J. Cunningham, of Sandy Hill, N. Y., has secured an option on a water power site on the Hudson River near Riverside.

PATERSON, N. J.—The Engineering Supervision Co., 35 Nassau St., New York, writes us that investigations are being made for the erection of a central heating and lighting plant in Paterson in center of the burned district. Nothing definite has been done as yet.

BLOOMBURG, PA.—A local company is being formed to build a plant here.

DANVILLE, VA.—The Dan River Power & Mfg. Co. is making surveys for its proposed power plant, to cost about $800,000, according to reports.

PETERSBURG, VA.—Reports state that the Virginia Passenger & Power Co., which recently purchased the Richmond Passenger & Power Co. in Richmond and the Southside Ry. & Development Co. in Petersburg, has contracted for machinery to be used in an additional power plant at the locks near this city, to cost $40,000. The building of this plant is only a preliminary step in the development of the water power at the locks. There is a fall of 100 ft. at this place, capable of developing more than 10,000 HP. The company contemplates building a plant at this point and making other improvements that will cost about $500,000.

GRAFTON, W. VA.—The Iron City Engineering Co., of Pittsburg, has been awarded the contract, at about $5,000, for an electric plant for the reform school. Other improvements are to be made, according to reports. W. J. Worley, Chn. Bd., Kingwood, W. Va.

GRIFFIN, GA.—S. Grantland writes us that he is making surveys for a plant to transmit power and will erect a mill as soon as the power reaches this place.

AVONDALE, ALA.—The question of building an electric plant is again being considered.

GREENVILLE, ALA.—Nuveen & Co. have purchased $10,050 of bonds for the proposed electric plant.

OZARK, ALA.—Surveys are being made by the company to build the electric plant.

NEW ORLEANS, LA.—The specifications for the proposed lighting and power system, the bids for which are to be opened April 7, as advertised in Engineering News, may be seen at the office of this paper, 220 Broadway, New York. W. J. Hardee, Cy. Engr.

CLEVELAND, TENN.—The Cleveland Electric Light Co. proposes to improve its plant at a cost of $10,000. P. H. Walker, Pres.

JOHNSON CITY, TENN.—Bids are asked until April 16 for a power house and barracks building for the mountain branch of the N. H. D. V. S. J. H. Freedlander, Arch., 244 Fifth Ave., New York; M. T. McMahon, Pres., 932 N. Y. Life Insurance Bldg., New York.

LEBANON, TENN.—An election will be held April 2 to vote on the question of issuing $5,000 in bonds for an electric plant and $15,000 for a school building.

CANTON, O.—Jacob Jobst, of Peoria, Ill., is reported to have begun work on the proposed power house for the National Ry. Co.

COLUMBUS, O.—The people will probably soon vote on the question of issuing $175,000 in bonds for a municipal electric plant. Dr. Washington Gladden, Chn. Com.

NATIONAL MILITARY HOME, O.—Bids are asked until April 3 for extending the electric plant at Central Branch, N. H. D. V. S. A. J. Clark, Treas.

OWEN, O.—Reports state that John D. Owens, of this place, will build a plant and water-works at once, which he will present to the village.

INDIANAPOLIS, IND.—The board of works will probably let a new contract about June 30 for lighting for a term of years, the present contract expiring in July, 1903.

CHARLOTTE, MICH.—The Charlotte Mfg. Co. has been granted a five-year franchise for an electric plant and hot water heating.

JACKSON, MICH.—The council has turned down a proposition to issue $100,000 in bonds. A new hotel is to be built here. P. B. Loomis, Jr., Mem. Bd. Pub. Wks.

JOLIET, ILL.—The water power generated by the drainage canal will soon be used to furnish light to a portion of Chicago. The Economy Light & Power Co. has announced that a lease has been closed with the Edison company by which 2,000 HP. of that generated at the plant at Jackson St. in Joliet would be furnished the Edison concern. Another lease has been concluded with the Illinois Steel Co. by which 1,700 HP. will be furnished the Joliet plant of that concern, and a third lease for 500 HP. for the operation of the Bridgeport pumps has been signed. Contracts have been let to the Joliet Bridge & Iron Co. for a building 375 ft. long, to the Seattle Timber Supply Co. for new poles, the General Electric Co., New York, for electric equipment, and James Leffel & Co., Springfield, O. Estimated cost of extensions, $200,000.

CHARLESTON, ILL.—John Miller and J. T. Severns, of Malloon, Ill., have been awarded the contract for the gas mains, to cost $4,500, for the new gas plant.

STERLING, ILL.—The Sterling Gas & Electric Light Co. has let the contract for a new gas holder of 100,000 cu. ft. Edward Morrill, Engr., Chicago.

BLACK RIVER FALLS, WIS.—This place recently voted on the question of the municipal ownership of the electric plant, now owned by F. S. Mason & Son. Address Mayor Bright.

BURLINGTON, IA.—This city has voted to grant a franchise for an electric plant and gas plant to the General Electric Co. of Chicago.

IOWA CITY, IA.—This place will vote March 31 on the question of granting a heating and lighting franchise.

KEOKUK, IA.—Lyman E. Cooley, of Chicago, has submitted a report on the proposed water power project at the Des Moines Rapids of the Mississippi River, near this city.

MAXWELL, IA.—The Iowa Light & Heat Co. has been granted a franchise for a gas plant.

COLD SPRING, MINN.—This place has voted to issue $8,000 in bonds for a plant and water-works.

DETROIT, MINN.—O. M. Metcalf, of St. Poul, Minn., has been granted a 25-year franchise and a 15-year contract for public lighting and pumping. Geo. C. Bush, Pres. Council.

RUSHFORD, MINN.—This place will vote April 7 on the question of issuing $7,000 in bonds for an electric plant.

WELLINGTON, KAN.—The Hodge-Walsh Electric & Engineering Co., of Kansas City, Mo., has been awarded the contract, at $19,450, for an electric plant. Gilbert, Welch & Co., of Denver, Colo., submitted the only other bid, at $21,600.

WICHITA, KAN.—Bids are asked until April 7 for 150 vapor street lights, to be equipped with Welsbach burners. J. L. Leland, Cy. Clk.——Local papers state that a franchise will be granted to the Natural Gas Co. for pipe lines, to be completed by March 1, 1903. The company proposes to pipe its gas from the Caney district, about 125 miles distant. The pipe will be laid by way of Arkansas City and Winfield; the latter place is also talking of an electric plant.

WYNDMERE, N. DAK.—Reports state that this place wants to build an electric plant.

TWIN BRIDGES, MONT.—Col. Burge, of Chicago, owner of the water right on the Big Hale River, proposes to build an electric plant of 1,000 HP. capacity.

ANACONDA, MONT.—This place will soon vote on the question of issuing $10,000 in bonds for an electric plant.

JEFFERSON CITY, MO.—The Citizens' Electric Lighting & Power Co., of St. Louis, Mo., has been granted permission to build a power plant in this city.

LEBANON, MO.—This place will vote March 29 on the question of issuing $25,000 in bonds to purchase the electric plant and the magnetic water-works.

DALLAS, TEX.—C. H. Alexander has been granted a franchise for a light and heat plant, J. P. Gerrin for a telephone line, C. L. Wakefield for a pipe line, and the Northern Texas Traction Co. for an electric railway.

CRIPPLE CREEK, COLO.—Clarence A. Powers has been granted a 25-year franchise for an electric plant.

FORT COLLINS, COLO.—Bonbright & Co., Lunt, Brooks & Wilcox and C. H. White, of Colorado Springs, have purchased the electric plant at this place, and, it is stated, will make extensions to the same.

LYONS, COLO.—Geo. M. Gilmore, of Denver, Colo., has been granted a 20-year franchise for an electric plant.

SALIDA, COLO.—A. T. Hathaway, of this place, is promoting a plan to build a light and power plant near Salida.

EVERETT, WASH.—The council has refused to grant a franchise for an electric plant to C. H. Baker. J. H. Mitchell, Cy. Clk., writes us that it is not likely that a franchise will be granted to anyone very soon.

SEATTLE, WASH.—The Citizens' Light & Power Co. has accepted a franchise to build and operate a gas plant, to be completed by Dec. 31. L. C. Smith, Pres.; J. W. Clise, Local Mgr.

REDLANDS, CAL.—The Redlands Electric Light & Power Co. has let the contract for a steel pipe line 3,000 ft. long to connect power house No. 2 with the cement pipe which will bring the water from the mountain.

SAN JOSE, CAL.—C. W. Quilty, Pres. San Jose Electric Light & Power Co., has sold his holdings in the Salinas Gas, Water & Electric Lighting Co. to Messrs. Gardner, Hubbell and Smith, of Los Angeles, who propose to extend the plant of the latter company so as to supply light and power to the smaller towns of southern California.——The Standard Electric Co., controlled by the Electric Improvement Co., H. J. Edwards, Pres., is preparing to extend its plant as far south as Gilroy and Los Gatos.

BOISE, IDAHO.—The Boise Gas Co., Ltd., has been granted a franchise for a gas plant, to cost about $90,000. B. F. Olden, Pres.; Wm. Simons, Secy.

MONTREAL, QUE.—The Beauharnois Light, Heat & Power Co. has applied for incorporation to build a power plant, etc.; capital, $200,000.

FORT WILLIAM, ONT.—This town has been granted permission to build a power plant of 10,000 HP. capacity at Kakaheka Falls.

KEMPTVILLE, ONT.—A. Bowen, of this place, will build a power plant, according to reports.

TORONTO, ONT.—The city engineer has submitted estimates for an arc light plant of 150 lights capacity for the Island, to cost about $30,000.

RUSKIN, B. C.—Reports state that Frank Adamson, of the Stave Lake Power Co., and Hermon, Garden & Burwell, of Vancouver, B. C., are interested in a project to build a power plant at the Stave River Falls.

BRIDGES.

BANGOR, ME.—A span and two piers of the Maine Coal Railroad bridge were swept away by a flood of last week. The wood toll bridge between this city and Brewer was also much damaged.

LUBEC, ME.—Press reports state that two bridges over the Whiting River were carried away by the freshet of last week.

BOSTON, MASS.—A bill is before a legislative committee advocating the construction of a bridge over Fort Point Channel at I St., in South Boston.

QUINCY, MASS.—The contract for a highway bridge crossing the Weymouth Fore River at Quincy Point has been let to the Fore River Ship & Engine Co., Quincy, Mass.

ALBANY, N. Y.—Bids are asked until April 2 by the superintendent of public works, Albany, N. Y., for building a bridge over the Clark and Skinner Canal at Buffalo, and also for constructing a lift bridge over the Erie Canal in Rochester.

COHOCTON, N. Y.—Bids are asked until March 28 for a 50-ft. steel bridge across the Cohocton River. Bridge to be 22 ft. wide, with 6-ft. sidewalk. E. B. Slayton, Com.

CUBA, N. Y.—It is reported that the Erie R. R. Co. is to build a double-track bridge near Portage Falls.

FISHKILL, N. Y.—W. R. Schofield, C. E., has been authorized to prepare plans and estimates of widening the Fountain St. bridge, and also plans for the strengthening of the bridge at its present width.

GOSHEN, N. Y.—Local press reports state that it will cost this town about $10,000 to replace and repair bridges damaged by the recent flood.

ROME, N. Y.—City Engineer Capron has suggested that the council provide for the erection of a bridge at Ridge Falls to span a 60-ft. opening.

BRIDGETON, N. J.—The county freeholders have authorized a committee to advertise for bonds not exceeding $10,000 for building a bridge over Dividing Creek.

PENNSYLVANIA.—Some of the bridges that will be rebuilt by the state are as follows: Beaver Run, Cedar Run, Broadhead's Creek, Fishing Creek, Harris Run, Kettle Creek, Larrys Creek, Loyalsock Creek, Lycoming Creek, Harris Run, Otter Run, Pine Bottom Run, Pine Creek, Plunketts Creek, Sinnemahoning Creek, Tombs Run, Trount Run, Upper Pine Bottom Run, Willis Run, White Deer Hole Creek.

ALLENTOWN, PA.—A public meeting was held last week to devise means to erect a temporary bridge across the Lehigh River as soon as possible.

ALTOONA, PA.—The council has been considering a proposition for the erection of a bridge at 11th St. According to plans prepared by City Engineer Linton, the bridge can be constructed for $110,000.

GLASGOW, PA.—Reports state that the stone arch bridge at this place, recently swept away by floods, is to be replaced by a structure of the same design.

POTTSVILLE, PA.—According to reports, the Schuylkill county commissioners place the number of bridges damaged or destroyed by the recent flood at 50, valued at $50,000.

SCRANTON, PA.—The sum of $21,000 has been asked for rebuilding the Race St. bridge, according to reports.

WHITEMARSH, PA.—Efforts are being made to have a bridge constructed over the Wissahickon at Skippach road.

CHESTERTOWN, MD.—Bids will be received by the Kent and Queen Annes county commissioners April 23 for a new draw to Chester River bridge, both wood and iron. H. T. Jewell, Clk. Kent County Bd.

ELKTON, MD.—The bridge across the Sassafras River at Georgetown, connecting Cecil and Kent counties, will be built by the York Bridge Co., York, Pa.

MARTINSVILLE, VA.—Col. C. B. Bryant has been appointed a commissioner to get estimates on the cost of proposed bridges over Smiths River and Leatherwood Creek.

WINCHESTER, VA.—Bills have been passed authorizing the Clark county supervisors to build bridges over the Shenandoah River at Castleman's Ferry and Berry Ferry.

MORGANTOWN, W. VA.—A bill has been passed authorizing the Central R. R. of West Virginia to build a bridge across the Monongahela River at this place. The bridge may be built for both railroads and wagons and for foot passengers. The approximate cost is $100,000.

PALM BEACH, FLA.—The contract for the draw span of a railway and highway bridge which the Florida East Coast Ry. is constructing across Lake Worth has been let to the Virginia Bridge & Iron Co. The rest of the structure is creosoted piles for center pier and fenders and untreated yellow pine piles protected by sewer pipe filled with concrete. Hildreth & Co., Consult. Engrs., 32 Broadway, New York.

COLUMBUS, O.—Bids are asked by the Franklin County Auditor until March 28 for the purchase of $70,000 of bridge emergency bonds and $100,000 of Hayden Run bridge bonds.

COLUMBUS, O.—Bids are asked until April 4 for building the substructure and superstructure of six bridges. L. E. Jones, County Auditor.

NEW PHILADELPHIA, O.—Bids are asked by the county commissioners until April 18 for building two bridge abutments for a bridge over Sugar Creek. C. C. Fernsell, County Auditor.

TOLEDO, O.—Bids will be received by the Toledo Railway & Construction Co., Nasby Bldg., until April 10 for the substructure of bridge over Maumee River, as stated in our advertising columns. C. S. Davis, Consult. Engr., Toledo, O.; Thos. H. Tracy, Pres.

CRAWFORDSVILLE, IND.—Bids are asked until April 8 for the construction of several county bridges. James A. Harding, County Surveyor.

LAFAYETTE, IND.—Bids are called for until April 9 for erecting steel superstructure and repairing substructure for a bridge over the Wabash River at Brown St., this city. George A. Jamison, County Auditor; Melville W. Miller, County Engr.

MARION, IND.—Bids are asked by the county commissioners until April 22 for a 175-ft. steel bridge over the river at Matthews. Fremont Wilson, Ch. Engr.; Geo. A. Modlin, County Auditor.

BAY CITY, MICH.—Bids are asked until April 12 for constructing a swing pier at Cass Ave.; also for removing old wooden swing. J. H. Bloomshield, Engr. Bay County Bridge Comn.

GRAND RAPIDS, MICH.—Local press reports state that a proposition to bond the city for $150,000 for a new bridge at Wealthy Ave. and for one at Bridge St. will be submitted in combined form to the voters at the coming municipal election.

MANSFIELD, ILL.—Bids will be received by the Town Clerk, Mansfield, Ill., until March 28 for the erection of the Harris bridge in Blue Ridge county. The bridge is to be of a 62-ft. span, with a 16-ft. roadway.

RACINE, WIS.—The question of issuing $60,000 of bridge bonds will be submitted to a vote of the people.

WATERLOO, IA.—Press reports state that the new bridge across the Cedar River, at this place, is to be built of concrete, at a cost of $57,000.

ELK RIVER, MINN.—Mayor C. Q. Scofield writes us that the town is to be bonded for the bridge to be built by Elk River and Otsego. Bonds have not as yet been voted. Dr. N. K. Whittemore, Chn. Bd. Supervisors.

BURLINGTON, KAN.—Bids are asked until April 8 for the construction of three steel county bridges. W. M. Palen, County Clk.

SHERBROOKE, N. DAK.—Bids are asked until April 7 for the construction of steel combination bridges in this county. T. S. Hunt, County Auditor.

WASHBURN, N. DAK.—Bids are asked until April 8 for erecting a 65-ft. steel or combination bridge. August E. Johnson, County Auditor.

BOZEMONT, MONT.—The contract for building a steel truss bridge across East Gallatin River has been let to F. W. Vreeland, Bozemont, Mont., at $1,760.

JEFFERSON BARRACKS, MO.—P. S. Rabbitt, Engr. and Supt. Construction, Q. M. Dept., writes us that all bids received at depot quartermaster's office, St. Louis, Mo., for bridge work at Mound City, Ill., were rejected and new bids will be called for soon.

KANSAS CITY, MO.—The contract for constructing the piers and approaches of the Allen Ave. viaduct has been let to V. W. Flowerree.

LAMAR, MO.—The Barton county commissioners have decided to build a bridge near Leroy township at an estimated cost of $6,000.

TILLAMORT, ORE.—Bids are asked by the county commissioners until March 29 for building two 150-ft. Howe truss bridges.

OGDEN, UTAH.—Bids are asked by the county clerk, Ogden, Utah, until April 7 for building a steel highway bridge across Weber River, specifications for which are on file at this office.

BUILDINGS.

BOSTON, MASS.—Plans for a brick and stone apartment house on Columbus Ave. and Northampton St. are being prepared. The cost will be about $200,000.——Mrs. Clara E. T. Roberts, of Brookline, has purchased a lot at Woodland St., near Hyde Park Ave., on which will be erected an apartment house.——George Smith, deceased, of St. Louis, Mo., left $450,000 to Harvard University. The money will be used in building three dormitories.

MIDDLEBORO, MASS.—The trustees of the Peirce Memorial Library have decided to procure plans for the new $100,000 building.

WORCESTER, MASS.—R. C. Taylor will build a new theatre in this place, to cost $200,000. It will seat about 2,000, and will be opened Oct. 1.

NEWPORT, R. I.—Bids are asked until April 7 for constructing an ordnance repair shop at Fort Adams. Thos. H. Slavens, Q. M.

PROVIDENCE, R. I.—A site for the new building at Brown University offered by J. D. Rockefeller for the use of the religious societies of the institution, has been secured. About $100,000 will be spent in the new structure.——The finance committee of the House has reported back the bill to provide for the construction of a state armory in this city. The bill provides for an appropriation of $400,000 for the new building.

MIDDLETOWN, CONN.—It is stated that $100,000 will be expended this season in completing the dining hall at the State Hospital for the Insane.

BUFFALO, N. Y.—Mayor Knight has signed the bill authorizing the issue of $600,000 in bonds for the erection of schools.

ALBANY, N. Y.—Edmund A. Walsh, of this city, has been awarded a contract by the Delaware & Hudson R. R. for the construction of a 6-story building at Steuben and Chapel Sts., to cost $60,000. It will be of stone, brick and steel, 34 × 64 ft.——Andrew Carnegie has given the city of Albany the sum of $175,000 for use in the erection of a library.

MT. VERNON, N. Y.—Geo. H. Primrose will organize a company to build a theatre in this place to cost $100,000.

NIAGARA FALLS, N. Y.—Mrs. James A. Haynes is about to erect a new building at Third St. and Ferry Ave., to cost about $60,000. Contracts will be let at once. Chester R. Phelps, Arch., Gluck Bldg.——E. E. Joralemon, Arch., Gluck Bldg., has been commissioned to prepare the plans for the new Carnegie Library, to be built at a cost of $50,000.

NEW YORK, N. Y.—The stables of the American Express Co., at Lexington Ave. and 48th St., will be enlarged from plans by C. W. Romeyn, Arch., 55 Broadway, at a cost of $150,000. The addition will consist of two additional stories.——The Pennsylvania R. R. Co. has purchased the property situated between 32d and 33d Sts. and Eighth and Ninth Aves., to be used for the establishment of the proposed terminal station at 33d St. and Seventh Ave.——Excavations have been completed for the Hotel Astor, which will be built after plans by Clinton & Russell, Archs., 32 Nassau St., on the west side of Longacre Square, between 44th and 45th Sts. The building will be two stories below the curb and ten above it. It will have 600 bedrooms and 400 bathrooms. The cost of the structure and furnishings will aggregate about $5,000,000.——The building committee of the Kings County Pharmaceutical Society, 329 Franklin Ave., Brooklyn, has stated that ground will be broken for the proposed new building, which will cost about $40,000.

NEW YORK, N. Y.—Andrew Carnegie recently announced that he had given away 38 libraries on that day, including a few recently added to the original list. The list with the amounts allotted, has been compiled as follows: Reno, Nev., $15,000; Baraboo, Wis., $12,000; Greensburg, Md., $15,000; London, O., $10,000; Blue Island, Ill., $15,000; Littleton, N. H., $15,000; Paris, Ill., $18,000; Maquoketa, Ia., $10,000; Redfield, S. D., $10,000; Denver, Colo., $200,000; Las Vegas, N. Mex., $10,000; Goderich, Ont., $10,000; Bozeman, Mont., $15,000; Saratoga, N. Y., $10,000; San Benandino, N. Mex., $15,000; Danville, Ind., $10,000; Kokomo, Ind., $20,000; Santa Rosa, Cal., $20,000; Charlotte, Mich., $10,000; Brazil, Ind., $20,000; Fulton, N. Y., $15,000; New Brunswick, N. J., $50,000; Oskaloosa, Ia., $20,000; Yankton, S. D., $10,000; Berlin, Ont., $15,000; Benton Harbor, Mich., $15,000; Victoria, B. C., $50,000; Little Falls, Minn., $10,000; Newton, Kan., $10,000; Atlantic, Ia., $12,500; St. Thomas, Ont., $15,000; Iowa City, Ia., $25,000; Beatrice, Neb., $20,000; Cedar Falls, Ia., $15,000; Dennison, Ia., $10,000; Hampton, Ia., $10,000; Athol, Mass., $15,000; New Albany, Ind., $35,000; Tipton, Ind., $10,000; Mount Clemens, Mich., $15,000; Chicago Heights, Ill., $10,000; Waukesha, Wis., $15,000.

NEW YORK, N. Y.—Plans have been filed by E. R. Chapman, 132 West 47th St., for a 13-sty. brick hotel, 40 × 90 ft., in West 47th St., to cost $200,000. H. Anderson, Arch., 1183 Broadway; by C. Rohe, 17 West 87th St., for a 5-sty. brick packing house, 70 × 99 ft., at 527-31 West 36th St., to cost $60,000. Werner & Windolph, Archs., 27 West 33d St.; by C. M. Gilbert, 2 East 15th St., for 6-sty. brick lofts, at 23 East 17th St., 25 × 76 ft., to cost about $25,000. W. H. Birkmire, Arch., 396 Broadway; by the Library Square Realty Co., 460 Fifth Ave., for an 11-sty. club-house, 50 × 88 ft., at 54-56 West 40th St., to cost $200,000. York & Sawyer, Archs., 156 Fifth Ave.; by the J. W. Stevens Bldg. Co., 156 Fifth Ave., for a 10-sty. brick building, 29 × 130 ft., at Broadway and Great Jones St., to cost $250,000. J. W. Stevens, Arch.; by the Cossitt Land Co., 70 Worth St., for a 10-sty. brick building, 104 × 114 ft., in 48th St., to cost $250,000. J. B. Lord, Arch., 160 Fifth Ave.; by Polstein Bros., Bible House, for a 6-sty. tenement house, 50 × 57 × 42 ft., at 38-40 Stuyvesant St., to cost $32,000. G. F. Pelham, Arch., 503 Fifth Ave.; by the Polstein Bros., for a 6-sty. tenement house, at 329-31 East 17th St., to cost $42,000. G. F. Pelham, Arch.; by I. Mishkind, 774 East 173d St., for a 6-sty. brick tenement, 42 × 79 ft., at 153-55 East 18th St., to cost $50,000. Sass & Smallheiser, Archs., 23 Park Row; by the Bureau of Buildings of New York city, for a 3-sty. library building at 222-24 East 79th St., to cost $50,000. James B. Lord, Arch., 160 Fifth Ave.

NEW YORK, N. Y.—Wilson Eyre, Jr., Arch., 927 Chestnut St., Philadelphia, will receive bids until March 31 for a 10-story factory building, 25 × 123 ft., of fireproof construction, to be built at 15 John St., for the Dennison Mfg. Co

SYRACUSE, N. Y.—The New York Central R. R. has secured a permit to erect a new freight station at West and Water Sts., to be of brick and steel, 552 × 50 ft., and to cost $125,000.——The residuary estate of the late William Kirkpatrick has been turned over to the Onondago Historical Society for the erection of a new fireproof building. It will amount to $40,000.

ATLANTIC CITY, N. J.—Bids are asked until April 19 for erecting a dwelling addition at Absecon Light Station, Atlantic City, as stated in our advertising columns. Lt. Col. W. A. Jones, U. S. Engrs., P. O. Bldg., Philadelphia, Pa.

NEWARK, N. J.—Bids are asked until April 23 for the construction of an extension to the U. S. custom house and postoffice in this city. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

ALLENTOWN, PA.—Plans are about completed for a 7-story business block, 36 × 100 ft., for E. M. Young, 740 Hamilton St., at 720 Hamilton St., to be of brick and iron, and to cost $50,000. Contracts will be let early in April. Jacoby, Weishample & Biggins, Archs., 514 Hamilton St.

CONNEAUT LAKE, PA.—The Bessemer & Lake Erie R. R. will build a new hotel at this place, to cost $100,000.

EASTON, PA.—Seymour and Paul A. Davis, 3d, Archs., 907 Walnut St., Philadelphia, will receive bids until April 1 for the erection of a 7-story fireproof bank and office building in Centre Square for the First National Bank of Easton, John F. Gwinner, Pres. The building will be of stone, brick and iron, 40 × 120 ft., costing about $100,000. Boilers, engines and dynamos will be installed.

HARRISBURG, PA.—Bids are asked until April 12 for the erection of three new buildings for the Pennsylvania State Lunatic Hospital. Dr. H. L. Orth, Supt.

HARRISBURG, PA.—W. H. Spooner, Fifth and Second Sts., will receive bids until April 1 for a 4-story store and office building, to be of brick with steel frame, 53 × 158 ft., and to cost $50,000. P. Bernheizel & Son, Archs.

HOMESTEAD, PA.—The plans for the new stone and brick office building for the Monongahela Trust Co., in Eighth Ave., will soon be completed and bids called for. It will cost $50,000.

PHILADELPHIA, PA.—Otto Strack, Arch., 121 East 23d St., New York, has prepared plans for an apartment hotel at Broad, Stiles and Watts Sts., to cost $750,000, for which bids will be taken within 10 days. The building will be fireproof, of brick, stone and iron construction, 60 × 160 and 40 × 110 ft. Steam heat, electric light and refrigerating plants will be installed. The Majestic Apartment Hotel Co., Adolph Segal, Mgr., Drexel Bldg., will erect the new structure.

PHILADELPHIA, PA.—Estimates will be submitted early this week for a training school on York Road, to be built by P. A. B. Widener as a memorial to his wife. It will be three stores, 42 × 84 ft., with side wings 72 × 34 ft., and will cost, fully equipped, about $2,000,000.——An assembly hall, with a seating capacity of 1,000, has been donated to Haverford College as a memorial to the late Charles Roberts. It will be a fireproof building, costing about $50,000.——The trustees of Bryn Mawr College have authorized the rebuilding of Denbigh Hall, destroyed by fire a few days ago. The loss was about $70,000.——W. D. Pritchett, Jr., Arch., 424 Walnut St., is ready for bids for a 4-story warehouse, 88 × 40 ft., and a 2-story office building, 62 × 21 × 60 ft., at 11th and Hamilton Sts. and Ridge Ave., for Walls & Piersal.

PITTSBURG, PA.—F. C. Sauer, Arch., informs us that the 2-story natatorium building to be built here by the East End Natatorium Co. will be of brick and terra cotta on stone foundation. Subscriptions are now being received.——W. F. Trimble & Sons have received a contract for the erection of a 2-story brick and steel freight warehouse at Seventh Ave. and New Grant St., to cost $210,000, for the P., C., C. & St. L. R. R.——Plans have been prepared by the Pittsburg, Ft. Wayne & Chicago Ry. for the erection of a new freight station at 12th St. and Penn Ave., to cost $100,000. The building will be 311 × 44 ft. Bids will soon be called.

BALTIMORE, MD.—Glidden & Myers, Archs., Union Trust Bldg., are taking sub-bids for the new apartment house for the Cecil Apartment House Co., care Alex. Shaw, 10 South St., at Eutaw and Dauphin Sts., to cost $155,000. The building will be of brick and steel, fireproof, seven stories, 126x126 ft., and equipped with steam heat and electric light plants. The Cecil Construction Co., Union Trust Bldg., has the contract.——Parker & Thomas, Archs., 110 Union Trust Bldg., this city, will take bids until March 31 for a 2-sty brick, stone and iron bath building for the International Trust Co., of Maryland, to be 50 × 100 ft., and to cost $100,000. The site will be in Baltimore St., near Charles.

WASHINGTON, D. C.—W. B. Wood, 808 17th St., N. W., will take bids in a few days for the new brick and terra cotta building for the Chinese Embassy at the northeast corner of 19th and S Sts., N. W. It will be 3 stories, 100 × 100 ft., and cost $100,000. The Chinese Government will erect the new structure. Wu Ting Fang, Ambassador, 1764 Q St., N.W.

NORFOLK, VA.—Bids are asked until March 31 for the building of a county jail. C. H. Hart, Chn. Bd. Supervisors.

NORFOLK, VA.—Bids will be received by Wyatt & Notting, Archs., Builders' Exchange, Baltimore, Md., until March 31 for erecting an apartment house at Granby and Freemason Sts., for the Buckingham Apartment House Co., M. B. Crowell. The building will be 7 stories, 90 × 105 ft., of brick iron and stone fireproof construction, costing about $250,000. Steam heat and electric light plants will be installed.

RICHMOND, VA.—Bids are wanted by Hodges & Leach, Archs., 301 Charles St., Baltimore, Md., until April 8 for erecting the Hotel Colonial at 9th and Grace Sts., for Mrs. A. D. Atkinson, of this city, to be a fireproof structure, six stories high, 130 × 163 ft., of brick, stone and iron construction, costing about $350,000. The building will contain refregerating and ice-making machinery, steam heating and electric light plants.

RICHMOND, VA.—Jake Wells, Mgr. Bijou Theatre, is having plans prepared for a new theatre, to cost about $40,000.——The senate has passed a bill appropriating $180,000 for a new penitentiary building in this city.

WINCHESTER, VA.—Frye & Chesterman, Archs., Lynchburg, writes that bids will be received about April 15 for building a $20,000 bank building for the Farmers' & Merchants' National Bank, to be a brick and stone building, 40 × 82 ft.

WHEELING, W. VA.—O. T. Rhodes and Geo. R. Taylor are planning to build an apartment house to cost $50,000 or $75,000.

AUGUSTA, GA.—Paul Mustin, Chn. Bldg. Com. First Baptist Church, informs us that bids will probably be received on May 1 for the new edifice, to cost between $40,000 and $45,000. It will be of brick and stone, 20 × 160 ft.

ANNISTON, ALA.—Chas. W. Carlton & Co., Archs., Anniston, inform us that specifications are now ready for a brick and stone hotel building, five stories, 130 × 120 ft., to cost $75,000. The building will be erected by the Anniston Hotel Co., Inc.

VICKSBURG, MISS.—We are advised by Wm. Stanton & Son, Archs., that the proposition to erect a jail in this city has been postponed indefinitely.

ALEXANDRIA, LA.—Bids are asked until April 7 for the erection of a 3-story fireproof court house building for Rapides Parish at Alexandria.

NEW IBERIA, LA.—The following bids were received by the Supervising Architect, Washington, D. C., on March 18 for a post office: Congress Construction Co., Chicago, $47,638, time 14 months; Phillips & Taylor, New Iberia, La., $45,345, time 13 months.

YOUNGSTOWN, O.—The Youngstown Dry Goods Co. has recently increased its capital stock from $50,000 to $200,000, and will erect a business block in the near future. Plans are now in the course of preparation.

HAMMOND, IND.—Bids are asked until March 31 for erecting a library building at Huntington. R. I. Hamilton, Supt. Schools, Huntington.

MISHAWAKA, IND.—Bids are wanted by Rev. A. B. Oechtering, 220 West Fourth St., until April 2 for the erection of a school and hall building. C. A. Brehmer & Co., Archs., 220 Michigan St.

MUNCIE, IND.—Plans are wanted by the Commercial Club for the erection of a new 4-story brick or stone building. G. A. Ball, Chn. Com.

SMITHVILLE, IND.—Bids are asked until April 1 for erecting a 2-story brick school. L. Warren, Trustee.

DETROIT, MICH.—The board of directors of the Y. W. C. A. has decided upon the plans for the new building as prepared by Donaldson & Meier, Archs. It will require $110,000 to complete the structure.

GRAND RAPIDS, MICH.—The new Majestic Opera House which Williamson & Crow, Archs., have designed to replace the burned Powers Opera House will cost about $100,000.

CHICAGO, ILL.—John H. Wagner, Arch., 107 Dearborn St., has plans for a 7-story building to be erected for W. D. Ewart at 11-15 Jefferson St. It will be of mill construction, with steel columns and girders, and will cost $100,000.——John M. Van Osdel, Arch., 225 Dearborn Ave., has made plans for the building to be built at Jackson Boulevard and Canal St., to be 150 × 150 ft.——E. M. Newman, Arch., Stock Exchange Bldg., has designed a fireproof apartment house to be built on Woodlawn Ave., north of 47th St. It will be four stories, 88 × 71 ft., and cost $75,000.

HOPEDALE, ILL.—This town will vote on the proposition of issuing bonds for a jail.

MATTOON, ILL.—Bids are asked until March 28 for erecting a high school building. O. W. Ferguson, Secy. Bd. Education. Reeves & Baillie, Archs., Peoria.

WAUKEGAN, ILL.—Dr. Julius C. Hoffman, Chicago, has closed a deal for the purchase of some 100 acres of land near this place, to be used in connection with a sanitarium, which he will erect at a cost of $150,000.

LANCASTER, WIS.—Bids are asked until April 9 for the construction of a court house in this city. J. M. Gardner, Chn. County Bldg. Com.

MILWAUKEE, WIS.—Plans are wanted by April 14 for the erection of a public school building at 37th and Roberts Sts., to cost $55,000; also by May 2 for a 3-story brick and stone school building at Auer Ave. and 24th St., to cost $65,000. Address the Board of Public Works.——The council committee on public buildings and grounds has decided to recommend to the council the purchase of the site for the natatorium and library building, to cost about $50,000.

BEMIDJI, MINN.—It was recently voted to issue $50,000 in bonds for the erection of a court house.

HERON LAKE, MINN.—Bids are asked until April 10 for the erection of a school house. L. F. Lammers, Pres.

MINNEAPOLIS, MINN.—A permit has been issued to the Y. W. C. A. for a new building at 87-89 Seventh St., to be four stories and to cost $50,000. W. C. Whitney, Arch., Loan & Trust Bldg.—E. G. Walton, of this city, and Luther Cushing, St. Paul, are interested in the plan to erect an $80,000 office building at Second Ave. and Fourth St.——I. R. Berry and Walter R. Brown will erect two flat buildings on 28th St., to cost $130,000.

ST. PAUL, MINN.—Newman & Hoy have been awarded the contract for a 5-story brick building at Fifth St. and Broadway, to cost $75,000.

HOUSTON, TEX.—The International & Great Northern R. R. has purchased two blocks of ground in this city, to be used as a site for a freight warehouse costing about $250,000.

SAN ANTONIO, TEX.—Wm. Simms and Samuel Berliner will erect a $55,000 building at Navarro and Houston Sts.

TEXARKANA, TEX.—The International Creosoting & Construction Co., Galveston, has begun the erection of another wood-preserving plant at this place, to be operated in connection with its plant at Beaumont. The works will occupy a piece of ground 2,000 × 500 ft. The main building will be 210 × 105 ft, and is to be equipped with two cylinders 9.5 × 165 ft.; one cylinder, 6 × 125 ft.; four elevated working tanks at 100,000 gallons capacity each; one underground tank, 40 × 12 ft.; two Babcock & Wilcox boilers 250 HP. each; superheaters, vacuum, pressure and circulating pumps and centrifugal pump for elevating oil from discharge tank to elevated tanks. For lighting purposes the plant will have an 80 arc light dynamo. There will be two miles of main track and sidings, used in connection with the works. The total capacity of the three cylinders will be 160,000 ft.,B.M. R. G. Miller, Secy-Treas.

COLORADO SPRINGS, COLO.—The Woodmen Building Association has decided to raise funds for a site and the erection of a temple to cost $100,000. Samuel T. Hamilton.

SEATTLE, WASH.—An office building will be erected by J. D. Lowman at First Ave. and Cherry St., at a cost of $200,000. The building will be 10 stories, and plans will be by De Neuf & Heide, Archs.——The contract for a $45,000 warehouse for Ainsworth & Dunn Fish Co. has been let to Gribble, Skeene & Co.

ALAMEDA, CAL.—Plans have been called for a new high school building to cost $50,000.

LOS ANGELES, CAL.—A syndicate of local and Pasadena capitalists has taken steps to purchase a site at Fifth and Broadway for the proposed 10-story building to be erected within a year at a cost of $300,000. The building will be entirely fireproof, and the dimensions will be 62 × 50 ft. R. A. Rowan is negotiating for the property.

RENO, NEV.—The Federal Senate has passed bills appropriating $70,000 for a public building at Reno, and $200,000 for a building at Ogden, Utah.

PROVO, UTAH.—The Rio Grande Western and Oregon Short Line Railroads will erect a union depot at this place, at a cost of $50,000, each to share one-half of the expense.

SALT LAKE CITY, UTAH.—Bids are asked until May 5 for the construction of a U. S. court house and post office in this city. James Knox Taylor, Supervising Arch.

QUEBEC, QUE.—Bids are asked until April 8 for the construction of an artillery workshop at Quebec. Fred. Gelinas, Secy. Dept. Pub. Wks., Ottawa.

SMITH FALLS, ONT.—The Frost & Wood Co. has had plans prepared for a new office building on Water St. Another building will be erected this summer. C. B. Frost, Pres.

TORONTO, ONT.—Bids are asked until March 31 for the completion of the Bathurst St. School. R. A. Buck, Chn. Com.

WINNIPEG, MAN.—Bids are asked until April 14 for erecting a hospital for the immigrant building. Fred. Gelinas, Secy. Dept. Pub. Wks.

WATER-WORKS.

ASHFIELD, MASS.—This town has voted to postpone the matter of securing a water supply.

BOSTON, MASS.—Bids are asked until April 1 for laying about 27,000 ft. of 48-in. pipe, and until April 15 for 9,800 ft. of 48-in. pipe in Brighton, and bids will soon be asked for 9,200 ft. of 60-in. pipe, etc., as stated in our advertising columns. W. N. Davenport, Secy. Met. Water and Sewerage Bd.

EASTHAMPTON, MASS.—The water commissioners are considering the question of constructing gravity works to cost $100,000, or of improving the pump stations. E. C. & E. E. Davis, Engrs., Easthampton.

EVERETT, MASS.—Bids are asked until April 5 for furnishing water pipe, castings, etc., as stated in our advertising columns. Henry Schrow, Chn. Bd. Pub. Wks.

FALMOUTH, MASS.—It is proposed to issue $30,000 in bonds for extending the water mains to West Falmouth.

FALMOUTH, MASS.—The general court will soon be asked to grant this place authority to issue $175,000 in bonds for the purchase of the works of the Falmouth Water Co. The question of extending the works to West Falmouth is also being considered.

GREAT BARRINGTON, MASS.—E. A. Ellsworth, of Holyoke, Mass., is preparing plans for a gravity water supply. There will be a 60-ft. and a 35-ft. dam.

HATFIELD, MASS.—The water mains will be extended to W. Hatfield at a cost of $1,000. C. L. Graves, Moderator.

LANESBORO, MASS.—The question of works to cost $25,000 is again being considered, according to reports.

LYNN, MASS.—It is proposed to extend the basin and raise the dam at the Walden Pond, lay mains, etc., to cost about $325,000.

SUNDERLAND, MASS.—The matter of securing a new water supply is being considered. F. L. Whittemore, Chn. Bd. Selectmen.

PAWTUCKET, R. I.—Commissioner Barclay of the public works has been allowed $20,000 to make extensions at once to the water mains.——The Pawtucket Valley Water Co. has been given permission to increase its capital to $75,000, for the purpose of building a new reservoir, etc.

SOUTH NORWALK, CONN.—The water commissioners propose to extend the pipe line to Walton and also to build a new reservoir.

NORWICH, CONN.—The water department proposes to extend the 6, 8 and 10-in. mains at a cost of about $15,000.

GOSHEN, N. Y.—This place has voted to appropriate $30,000 for improving the works. R. B. Hock, Village Pres.

JAMESTOWN, N. Y.—The committee has reported in favor of buying the works of the Jamestown Water Supply Co. for $600,000. A. C. Wade, Chn. Com.

JAMESTOWN, N. Y.—J. E. Johnson, Mayor, writes us that nothing has yet been done regarding the proposed new works.

LOCKPORT, N. Y.—The council has let a contract to the Niagara, Lockport & Ontario Power Co. to supply this city with water. The company will at once begin to build a canal to cost several million dollars and the city will spend about $500,000. The canal will also be used to develop about 100,000 HP. The water will be brought from La Salle, a distance of 18 miles. Wm. M. Luther, of Buffalo, N. Y., is interested.

CHADWICK, N. J.—Bids are asked by Stemmler, 18 E. 17th St., N. Y., for sinking an artesian well, as stated in our advertising columns.

PAULSBORO, N. J.—The Paulsboro Water Co. has been incorporated with a capital of $50,000 by B. G. Paul, B. S. Cox and W. J. Adams.

ALLEGHENY, PA.—Bids are asked until April 3 for two 15,000,000-gallon, two 1,500,000-gallon, one 5,000,000-gallon pumping engines, two 350-HP. boilers and the masonry, brickwork and excavation at the Montrose station. Robt. McAfee, Dir. Dept. Pub. Wks.

ASHLAND, PA.—Frank O'Neil, of Fountain Springs, Pa., has been awarded the contract at about $2,500 for work on the reservoir.

CORAOPOLIS, PA.—Geo. F. Seebick, of Pittsburg, Pa., has purchased from this city $52,000 of 4½% water and light bonds.

McKEESPORT, PA.—The following contracts for water department supplies have been awarded: Pig lead, pipe, curb cocks, etc., the Bailey, Farrell Co., Pittsburg; corporation cocks, Mueller Mfg. Co., Decatur, Ill.; c. i. pipe and fittings, U. S. Cast Iron Pipe & Foundry Co., Chicago; brass valves, R. D. Wood & Co., Philadelphia; packing and waste, the Johnson, Moorehouse Co. and the Dickey Co., of Pittsburg. T. H. Verner, Supt.

MONTOURSVILLE, PA.—The question of a permanent water supply is being considered. Geo. Brass, Water Com.

TAMAQUA, PA.—This place will vote April 15 on the question of issuing $35,000 in bonds for improving the works.

HARRINGTON, DEL.—The Harrington Water & Light Co. has been incorporated with a capital of $20,000 to build works and an electric plant.

BALTIMORE, MD.—The Rys. & Light Co. of America, J. W. Middendorf, Pres., has combined the companies furnishing water to Suffolk, Berkley and Portsmouth, Va., into one company known as the Portsmouth, Berkley & Suffolk Water Co. with a capital of $1,000,000. A number of important improvements are to be made. D. W. Pender, Pres., Norfolk, Va.; H. P. Page, Secy., Baltimore.

LYNCHBURG, VA.—The council has voted to build gravity works at a cost of about $600,000, according to reports. Councilman Craddock, Chn. Water Com.

MANASSAS, VA.—Reports state that this place will soon issue $30,000 in bonds for works, an electric plant and paving.

SOUTH BOSTON, VA.—It is stated that steps are being taken looking toward the construction of works and a sewerage system to cost $20,000.

WELLSBURG, W. VA.—This place will vote April 8 on the question of issuing $10,000 in bonds for a better water supply. Address Mayor Simpson.

ASHEVILLE, N. C.—Bids are asked until April 22 for about 14 miles of 16-in. c.-i. water pipes, as stated in our advertising columns. B. M. Lee, Cy. Engr.

FLORENCE, S. C.—An election will be held March 31 to vote on the question of issuing $10,000 in bonds for extending the works.

MARION, S. C.—The matter of building works is being considered. Address Mayor Wilcox.

DOUGLAS, GA.—The Douglas Ice & Power Co. has increased its capital and will at once begin the construction of water-works and an electric plant.

HUNTSVILLE, ALA.—The question of water meters is being considered. Frank Murphy, Supt.

BILOXI, MISS.—The Biloxi Artesian Water-Works Co. proposes to improve its plant at a cost of $5,000. The city is talking of building works to cost about $40,000.

COLUMBUS, MISS.—This place voted March 25 on the question of issuing $50,000 in bonds for sewers, water-works purposes, city hall, etc.

ROSEDALE, MISS.—Bids are asked until April 13 for furnishing the materials and for constructing works, as described in our advertising columns. Omberg & Dabney, Engrs., Memphis, Tenn.; O. D. Thomas, Clk.

VICKSBURG, MISS.—Edward J. Obirne, of Birmingham, Ala., has been awarded the contract at $37,861 for constructing works and an electric plant.

JENNINGS, LA.—Bids are asked until April 15 for constructing works to cost $25,000, a sewerage system to cost $15,000, and a town hall to cost $10,000. H. H. Hoag, Clk.

RAYNE, LA.—Councilmen R. C. Webb, Jonas Weil and David Levy are on a committee to report for a water supply and an electric plant

HARRIMAN, TENN.—Willard Griffith writes us that the city will extend the water mains to cost $1,500 and build a new intake to cost $4,000.

BELLAIRE, O.—The question of improving the water-works is reported as being considered.

BRADNER, O.—New bids will be received at once by Mayor Krick for constructing works to cost $13,500, according to reports.

CINCINNATI, O.—Bids are asked until March 28 for a house over the intake pier, and until April 4 for sewers, water conduits, valves, etc. Chas. G. Roth, Clk. Bd.

FINDLAY, O.—This city will vote April 7 on the question of issuing $150,000 in bonds for a new water supply. The works will include wells, 3,000 tons of pipe, improving reservoir, etc. W. J. Frey, Pres. Water Bd.

MIAMISBURG, O.—At the spring election this place will vote on the question of granting a franchise to the Miamisburg Light & Water Co. to construct and operate works and an electric plant.

PAULDING, O.—J. P. Force, 41 Dispatch-Butler Block, Columbus, O., has been engaged to prepare plans for works to cost $35,000. J. C. Bruning, of Pemberville, O., has the contract for three 8-in. wells. W. J. Savage, Secy.

BLOOMFIELD, IND.—The Citizens Water Co. has been incorporated with a capital of $10,000 by C. O. Lucas and E. M. Hall.

WASHINGTON, IND.—The City Water Co. proposes to improve its works. C. E. Gray, Pres., Whitewater, Wis.; T. W Grey, Secy., Manitowas, Wis.

ELKHART, IND.—This city has voted to issue bonds for the municipal ownership of the works.

GROSSE POINTE, MICH.—This place has petitioned the city of Detroit to furnish it with a water supply. It will be about three months before work can be begun on the proposed water mains from Detroit to Hamtramck. Address Superintendent Staakey, of the Detroit Water-Works.

HOMER, MICH.—This place has voted down the proposition to issue $20,000 in bonds for works. H. O. Cook, Pres.

BIGGSVILLE, ILL.—This place will build works to cost $2,200, according to reports.

EAST PEORIA, ILL.—This place will soon vote on the question of issuing bonds for works. Address Mayor Keil and Alderman Thorne.

ELGIN, ILL.—At the election April 15 this place will vote on the question of issuing $60,000 in bonds for a new water supply from artesian wells. Address Mayor Price and Alderman Chittenden.

KEWANEE, ILL.—The aldermen have voted to issue $10,000 of 4% bonds for a 1,500,000-gallon reservoir, according to reports.

BARABOO, WIS.—The Baraboo Water-Works Co. has offered to sell its works, and the matter is being considered by Mayor McFetridge.

BLOOMER, WIS.—W. E. Kitch, Pres. of Village, writes us that the question of works will be submitted to the voters April 1. Pop., 900. Prof. J. J. Flather, Engr., Minneapolis, Minn.

MILWAUKEE, WIS.—Bids are asked until April 8 for furnishing 1,800 tons of 3 to 12-in. c.-i. water pipe, 100 single-nozzle fire hydrants, etc. C. J. Poetsch, Cy. Engr.

NEW GLARUS, WIS.—Bids are asked until April 4 for constructing works, as described in our advertising columns. W. G. Kirchoffer, Engr., Baraboo, Wis.

ALGOMA, IA.—This place is considering the question of works.

CUMBERLAND, IA.—Reports state that another election will soon be held to vote on the question of issuing $4,000 in bonds for works.

HARMONY, IA.—J. L. White, of Peru, Ill., is reported to have been awarded the contract at $8,250 for an air-lift system.

MUSCATINE, IA.—The legislature will soon be asked to permit this city to issue bonds for new works. R. S. McNutt, Mayor; W. L. Roach, Pres. Water Trustees.

NEWTON, IA.—W. C. Bergman, Chn. Water Com., writes that this city contemplates forming a company to build works, the water supply to be secured from the Skunk River. There will be required about 5½ miles of mains, driven wells, pumping stations, water tower, reservoir, etc. Efforts are being made to enlist outside capital.

RUSSELL, IA.—The question of works and an electric plant is being considered.

SLOAN, IA.—Bids are asked until April 21 for constructing partial works, as stated in our advertising columns. A. C. Koenig, Engr., N. Y. Life Bldg., Omaha.

COLD SPRING, MINN.—This place has voted to issue $8,000 in bonds for works and an electric plant.

GIRARD, KAN.—This place will soon vote on the question of issuing $10,000 in bonds for extending the mains.

CRAB ORCHARD, NEB.—This place will vote April 1 on the question of issuing $2,000 in bonds for works.

GRAND ISLAND, NEB.—This place will soon vote on the question of issuing $4,000 in bonds for extending the mains.

DE SMET, S. DAK.—This place will vote April 15 on the question of issuing $20,000 in bonds for works.

WHITE LAKE, S. DAK.—This place will soon vote on the question of issuing $1,500 in bonds for works.

CHEYENNE, WYO.—M. P. Keefe, Chn. Com., writes us that it is expected that bids will be wanted early in April for a stone dam.

DILLON, MONT.—Dr. M. A. Miller has submitted a proposition to put in works to cost about $50,000.

HOGAN, MONT.—J. H. Carmichael, living near here, proposes to build a dam 494 ft. long and 18 ft. high for an irrigation system.

MILES CITY, MONT.—This city will vote April 7 on the question of issuing $15,000 in bonds for extending the works.

MISSOULA, MONT.—The Missoula Water Co. proposes to improve its works at a cost of about $20,000.

PONY, MONT.—This place has voted to issue bonds for works, according to reports.

SILESIA, MONT.—The Mason Ditch Co. has been incorporated by A. G. Lockridge and Irwin Danford with a capital of $4,500.

TOWNSEND, MONT.—E. M. Wardwell is reported as making surveys for works.

HARRISONVILLE, MO.—This place, it is stated, will sink a deep well for a water supply.

LEXINGTON, MO.—Bids are asked until May 12 for constructing works on a franchise, as stated in our advertising columns. Louis Gratz, Register.

MORRILLTON, ARK.—The court has refused to enjoin the board of improvements from letting contracts for building works to cost about $53,600. Address Col. J. F. Steele.

BEAUMONT, TEX.—Jack Ennis is reported to have let contracts for 6½ miles of 6-in. water pipe, storage tanks, etc., for a water supply.

BEAUMONT, TEX.—The Treadaway Canal & Rice Co. has been incorporated with a capital of $400,000 by Jas. L. Keith, J. N. Gilbert and T. H. Langham.

CISCO, TEX.—Reports state that this place will issue bonds to buy and enlarge the works.

ELGIN, TEX.—Carl F. Drake, of Austin, Tex., and J. W. Maxcey, of Houston, have been awarded the contract to build works and an electric plant.

FLORESVILLE, TEX.—The council has refused to order an election to vote on the question of issuing $10,000 in bonds for works. It is now hoped that outside parties will offer to build the works.

LANCASTER, TEX.—This place has voted to issue bonds for works.

SAN ANTONIO, TEX.—The Illinois Irrigation Co. has been incorporated with a capital of $300,000 by F. A. Kimball, 532 Wyoming St., San Antonio, and H. M. Bumpas, of Pulaski, N. Y., to build an irrigation plant to reclaim about 40,000 acres.

FOWLER, COLO.—The Crystal Springs Pipe Line & Water Co. has been incorporated with a capital of $10,000 by H. M. Fosdick and J. J. Brown.

GLENWOOD SPRINGS, COLO.—Steps are reported as being taken to build works and an electric plant. B. T. Napier, Mayor.

NORTH ONTARIO, CAL.—The Cucamonga Water Co. has increased its stock to $500,000 and issued $150,000 of bonds, a portion of which will be used for improving the works.

MODESTO, CAL.—Bids are asked until April 15 by the Modesto Irrigation District for constructing a main and four lateral canals.

SAN FRANCISCO, CAL.—The Topkuk Ditch Co. has been incorporated with a capital of $500,000 by W. H. Emerson, W. S. Bliss and J. M. Davidson.

LEWISTON, IDAHO.—Ernest McCullough, Cy. Engr., writes us that this city will vote April 24 on the question of buying the works for $70,000. If the city buys the works it will want a new boiler of 100 or 125 HP., an additional pump of 300,000 gallons capacity, etc. Bids are wanted, f. o. b. Lewiston, until April 25.

CORNWALL, ONT.—The council committee wants plans for a new pumping plant. Councilman Brown, Chn. Com.

OSHAWA, ONT.—This place will vote March 27 on the question of issuing $150,000 in bonds for works and sewers.

VERNON, B. C.—Reports state that the question of improving the works is being considered. Address Mayor Megaw.

LUNENBURG, N. S.—This place on March 27 will consider the question of purchasing the works for $95,000.

SEWERAGE.

AUGUSTA, ME.—W. B. Getchell, Cy. Engr., writes us that the city proposes to build a 20-in. main sewer on Western Ave. from State to Sewell St., about 1,000 ft. in all. The average depth is to be 10 ft.; proposals are to be asked soon.

BAR HARBOR, ME.—This place has voted $2,500 for the completion of the drainage system of the district between Mt. Desert St., Main St. and Cromwell's Harbor Brook.

DOVER, ME.—The town has voted $1,500 for the construction of a sewer from Pleasant St. to the river.

BRIDGEWATER, MASS.—A committee has been appointed to investigate some means of sewage disposal. Josiah G. Bassett is a member of the committee.

EASTHAMPTON, MASS.—At the annual town meeting $7,925 was appropriated for new sewers and water pipe.

HOLYOKE, MASS.—James L. Tighe, Cy. Engr., writes us that the plans for a sewer at Ingleside Terrace have not yet been completed and the estimates given out. The contract for 700 ft. 24-in. Akron pipe sewer and 275 ft. 20-in. pipe sewer on the Hitchcock St. sewer has been let.

MARION, MASS.—B. A. Conro writes us that the sewerage proposition was side-tracked at the last annual town meeting.

MELROSE, MASS.—It has been voted to petition the legislature for authority to issue bonds, $100,000 for surface drainage and $50,000 for the water system.

METHUEN, MASS.—James S. Howe, Town Clk., writes us that $35,000 has been appropriated for the completion of the sewer work begun in 1901. Plans are already prepared. E. Worthington, Des. Engr.

NATICK, MASS.—P. E. Pettee, Supt. Sewers, writes us that 2,000 ft. 8-in. sewers, average cut 7 ft., are to be constructed at an estimated cost of $2,000. It is also proposed to construct three filter beds in addition to the number already owned by the town. The cost is estimated at $5,000.

NORTH ANDOVER, MASS.—J. W. Leitch, Town Clk., writes us that the proposed sewers in that place will be built by the highway surveyor in accordance with the plans accepted by the town some years ago.

QUINCY, MASS.—The council has passed an order appropriating $27,981 for sewer construction.

SOUTH FRAMINGHAM, MASS.—This town has voted to grant $6,087 for extending the low-grade sewer system in South Framingham.

WATERTOWN, MASS.—J. H. L. Coon, Chn. Selectmen, writes us that $5,000, the annual sum for sewer extension, has been appropriated; also $10,000 for sewer extensions at special locations and $10,000 for the beginning of a complete system of surface drainage. All of the work is done by the town engineers and no work is let out by contract.

ROCKVILLE, CONN.—J. T. McKnight, Cy. Engr., writes that the city has just appropriated $15,000 for a storm-water sewer in Maple and Union Sts., several catch basins and gutter connections are contemplated. The plans have not been made, only preliminary work having been done. About 2,200 ft. of 36-in. brick sewers and 1,300 ft. 24-in. pipe sewers will be used.

BROCKPORT, N. Y.—This place has voted in favor of building a sewerage system.

DUNKIRK, N. Y.—H. A. Holstein, Asst. Cy. Engr., writes us that the council has declared intention of constructing three seperate sewers of a total length of about 4,150 ft. One of these is a 15-in. tile sewer in Bass St., about 2,300 ft. in length, and the others are 10-in. pipe sewers, each 910 ft. long, to be constructed on either side of Fourth St. James P. Morrissey, Cy. Engr.; J. P. Groesch, Cy. Clk.

ILION, N. Y.—J. D. Ringwood, Cy. Engr., writes us that $4,600 has been voted for proposed sewers and that the State Board of Health has approved the plans. About a mile of 8-in. pipe sewers, of an average cut of 8 ft., will be required. The estimated cost is about $3,000. Nothing has been done about letting contracts for the work and the sewer board is undecided as to whether to call for bids or do the work by day labor.

JAMAICA, N. Y.—According to local reports bids are to be called for the completion of the sewer along the line of Lincoln Ave. About 2,308 ft. of sewer are yet to be laid.

LANCASTER, N. Y.—The citizens are to vote at the coming election on a proposition to authorize the making of a map and plans for a sewer system and a grade for sidewalks and streets.

LARCHMONT, N. Y.—This place, at a recent election, voted to issue $20,000 of sewer bonds.

LONG ISLAND CITY, N. Y.—Bids are asked until April 3 for constructing sewers in various streets. Jos. Cassidy, Queens Borough Pres.

PATCHOGUE, N. Y.—This village has voted to issue $10,000 of sewer bonds.

ROME, N. Y.—The committee preparing plans for a storm-water sewer at the Oneida County Home has decided to build a new sewer at once.

SARATOGA SPRINGS, N. Y.—A bill has been introduced in the legislature providing for the completion of a sewage disposal system for this place. The bill provides that $100,000 of bonds may be issued for that purpose.

SAUGERTIES, N. Y.—Knight & Hopkins, Rome, N. Y., have been engaged to prepare plans, specifications, etc., for a system of sewers for this place.

LAMBERTVILLE, N. J.—James H. Reynolds, Cy. Clk., writes us that the question of granting a sewerage franchise has been postponed.

NEWARK, N. J.—Bids are asked until April 3 for constructing 3,600 ft. brick sewer, as stated in our advertising columns. Ernest Adam, Engr. Street and Sewer Dept.

RIVERTON, N. J.—This borough has voted to construct a sewerage system. F. P. Hempkill, Borough Clk.

TRENTON, N. J.—Bids are asked until April 1 for building a sewer in Lafayette St. C. E. Murray, Cy. Clk.

DOYLESTOWN, PA.—The town council is considering an ordinance for the introduction of a sewerage system in the town. The ordinance was presented by the Doylestown Sewerage Co.

ERIE, PA.—The council has been considering ordinances for the construction of intercepting sewers in Mill Creek Valley.

McKEESPORT, PA.—Alexander Potter, Sanitary Engr., 150 Nassau St., New York, has been retained for expert services on the proposed Crooked Run sewer.

PHILADELPHIA, PA.—The council finance committee has recommended an appropriation of $10,000 for the extension of the 12th section of the Cohocksink sewer.

SUNBURY, PA.—Plans and specifications for a general sewerage system for this place have been prepared by Wm. H. Dechant, C. E., Reading, Pa.

WILLIAMSPORT, PA.—Press reports state that this city is contemplating the construction of a storm sewer. Fred. A. Snyder, Cy. Engr.

RALEIGH, N. C.—Surveys have been made looking to the connection of the penitentiary with the Raleigh sewerage system. A line of about a mile in length would be needed for the connection.

GREENWOOD, S. C.—Bids are asked until April 8 for a sewerage system and the extension of the water and light plant. W. G. Calhoun, Town Clk.

ATLANTA, GA.—An ordinance providing $29,400 for the extension of trunk sewers has been before the council.

FERNANDINA, FLA.—The city has voted to issue $75,000 of bonds for the construction of a sewerage system and for various other purposes.

BESSEMER, ALA.—According to reports plans for the proposed sewer system extensions are about complete. The estimated cost is about $70,000. The council will call for bids about the middle of April.

BESSEMER, ALA.—Bids are asked until April 22 for building about 16¼ miles of vitrified pipe sanitary sewers, as stated in our advertising columns. Wm. J. Parks, Cy. Engr.

OPELIKA, ALA.—G. L. Webster, Cy. Clk., writes us that a system of sanitary sewers is to be put in this summer by the Sanitary Sewerage Co., of Philadelphia.

JENNINGS, LA.—Bids for the construction of a $15,000 sewerage system, a $25,000 water-works system and a $10,000 town hall will be received until April 15.

COLUMBUS, MISS.—The question of issuing $50,000 of bonds was decided at an election March 25. Of this issue $20,000 will be used to complete the sewerage system.

ASHLAND, KY.—Bids are asked until April 7 for a lateral sewer in Carter Ave. Chas. D. Boggess, Cy. Engr.

FINDLAY, O.—Bids are asked until March 29 for building 8-in. pipe sewer in Flett Ave. P. H. Connolly, Bd.

ANGOLA, IND.—This place is considering the question of a sewerage system.

RUSHVILLE, IND.—Oglesby & Kelly have asked for a franchise for a sewerage system in this city. It is reported, that should the franchise be granted, the company will spend $100,000 in sewer construction.

RUSSIAVILLE, IND.—Reports state that a complete sewerage system is to be built here this summer.

PETOSKY, MICH.—The contract for a sewer in Grove St. has been let to Jas. S. King at $1,092.

FREEPORT, ILL.—Bids are asked until March 28 for construction of a storm sewer in Stephenson St. G. W. Graham, Cy. Engr.

RACINE, WIS.—Bids are asked until March 29 for building a sewer in Wisconsin St. P. H. Connolly, Bd.

ROCKWELL, IA.—The question of a drainage system for this place will be decided at the next municipal election.

ABILENE, KAN.—The council has contracted for plans and specifications for a complete sewerage system.

KANSAS CITY, MO.—Robert W. Waddell, Cy. Engr., writes us that plans and specifications for a sewer to drain valley east of Indiana Ave. have been prepared and are now before the city council.

LAWTON, OKLA. T.—A franchise for water-works and sewerage has been granted to J. M. Carter, representing the Texas Steel Rail & Equipment Co.

CHICO, CAL.—Richard White, Cy. Clk., writes us that bids will probably soon be asked for constructing the proposed system, to cost $45,000. The system will require about 13 miles of 12 to 6-in. pipe. A sewage disposal farm of about 75 acres and situated about three miles from the city has been purchased, and another lot has been secured for a water pumping plant for flushing the sewers. The completed specifications for the whole work were adopted March 18. Bids for the iron pipe to connect the flushing tanks were received March 21. O. L. Clark, Pres.; C. W. McLennan, Ch. Engr.

SELMA, CAL.—In our issue of Feb. 27 we inadvertedly stated that the average cost of the sewers in this place was 6.25 cts. per ft. What we intended to say was that the average cut was 6.25 ft.

NIAGARA FALLS, CAN.—Bids are asked until March 31 for constructing about 1,300 ft. of 10, 12 and 15-in. sewers and about 3,900 ft. of 8 and 9-in. sewers. John Robinson, Town Clk.

MONTREAL, QUE.—The sum of $15,000 has been appropriated for the completion of the St. James St. sewer.

GARBAGE DISPOSAL—STREET CLEANING

CHICOPEE, MASS.—Bids are asked until April 7 for collecting garbage, etc., for the year from May 1. H. G. Forbes, Chn. Bd. of Health.

NEW BEDFORD, MASS.—New Bedford Product Co. has submitted two propostions to collect and dispose of the garbage. A. E. Perry, Treas.

BROOKLYN, N. Y.—Bids are asked until April 15 for the final disposition of the garbage, refuse, etc., of Brooklyn, as stated in our advertising columns. J. McG. Woodbury, Comr. St. Cleaning.

ROCHESTER, N. Y.—M. W. Conway and Jos. Bantel have been awarded the contract at $40,130 for sprinkling the streets for the year. Bids for sweeping and cleaning 34 streets were received from the following: Martin McCormick, Bernard Krebs, S. V. Jenkins, Jr., M. J. Lavin, McKinney & Flora, John R. Sidney, Patrick Carey, John Klein, John Ungman, Chas. Drecoll, C. W. Hartung, Chas. Meisch, John Ruckert, Chas. Ungmer, Chris. Raufer, John McCook, Jacob Stuckey, Richard Homan, Frank Kimmel, Henry Caraher, Grand Ave. Horse Co., C. E. Lewis, John Roach, Richard Skuse, Geo. Bantel, Wm. Ely.

HOMESTEAD, PA.—The council is reported to have been asked to grant a franchise for a garbage disposal plant.

TURTLE CREEK, PA.—The Turtle Creek Valley Reduction & Construction Co., Pittsburg, has been incorporated with a capital of $50,000 by Jas. W. Waddell, Wilmerding, Pa., and Robt. W. Spellman, of Sawmill Valley, Pa., to build a garbage crematory, etc.

VICKSBURG, MISS.—We are informed that Wm. Stanton & Son, Archs. and Engrs., Bonelli Bldg., Vicksburg, are preparing plans for a garbage disposal plant for this city, and wish to be put in communication with manufacturers of such plants.

DALLAS, TEX.—The Dixon Crematory Co. has been awarded the contract at $12,926 for a 50-ton crematory.

STREETS AND ROADS.

BAR HARBOR, ME.—At the recent election it was voted to raise $6,000 for building a road to Eagle Lake.

NEEDHAM, MASS.—At the recent town meeting $10,200 was appropriated for various street purposes.

ALBANY, N. Y.—It is reported that the state appropriation for good roads this year will be $600,000.

GENEVA, N. Y.—Street paving bonds to the sum of $52,600 have been sold to N. W. Harris & Co., New York.

NEW YORK, N. Y.—The local boards are to meet March 27 to consider the plans for the grading and paving of Elm St. prepared by the engineers of the Manhattan department of public works.

ROME, N. Y.—The chamberlain has been authorized to ask for bids for the paving of North James St. with asphalt.

SOUTHAMPTON, N. Y.—A majority report of a committee on a proposed system of improved highways recommends the bonding of the town for $200,000 to build about 38 miles of macadam roads.

TROY, N. Y.—The contract for paving on Fifth Ave., between Broadway and State St., has been let to the North Hudson Contracting & Paving Co., Troy, N. Y., at $4,856. Other bids were as follows: Barber Asphalt Co., New York, $5,602; Schenectady Contracting Co., $4,908.

ELIZABETH, N. J.—Bids are asked until April 1 for paving Magnolia Ave. with Telford pavement, and for 6-ft. trap block gutters; also for paving on Trumbull St. N. K. Thompson, St. Comr.

ERIE, PA.—An ordinance providing for a bond issue of $22,000 for paving on North and South Park Rows and French St. has been passed on third reading. B. E. Briggs, Cy. Engr.

FRANKLIN, PA.—An ordinance has been passed for paving on Liberty St. The total cost will be about $14,200.

TARENTUM, PA.—F. A. Ready, Boro. Secy., writes us, under date of March 24, that the time for opening bids for paving Randolph St. with 4,580 sq. yds. of vitrified paving brick had not then been fixed, but bids would be called for this week. S. A. Taylor, Engr., 339 Fifth Ave., Pittsburg.

ASHEVILLE, N. C.—The council has passed a motion to pave Merriman Ave. within one year.

GREENSBORO, N. C.—We are informed that street paving work will be commenced soon, as the streets are already graded for the work. Paving will doubtless be of macadam. J. M. Bandy, Cy. Engr.

ATLANTA, GA.—The county commissioners have granted a petition for paving Ponce de Leon Ave. with broken stone and chert from the Springs to the city limits, and the work will commence as soon as the city is ready to commence paving on the same avenue from Peachtree St. to the city limits.

NASHVILLE, TENN.—The contract for laying granatoid paving along the esplanade at the Capitol building has been let to the Nashville Roofing & Paving Co., at $3,996.

CAMBRIDGE, O.—The question of issuing $15,000 of bonds to pay the city's share of the cost of paving North Eighth St. will be decided at an election April 8.

CELINA, O.—An engineer has been employed to make plans and specifications for the paving of West Fayette St.

CINCINNATI, O.—The contract for improving Piedmont Ave. from Burnet to Eden Ave. has been let to Frank H. Hirchner, at $11,243.

CINCINNATI, O.—Bids are asked until April 14 for the improvement of Wold Ave. Geo. F. Holmes, Clk. Bd.

DAYTON, O.—Bids are asked until April 16 for about 12,000 sq. yds. brick or sheet asphalt paving, 5,270 ft. straight curb, circular curb, etc. Robt. H. Ferguson, City Comptroller.

TOLEDO, O.—Bids are asked until April 14 for improvements on various streets. John E. Connell, Cy. Clk.

WYOMING, O.—L. W. Mathewson, Village Engr., writes us that bids will be received April 5 for improving Worthington Ave., 2,250 ft., with cement and concrete combined curb and gutter. The roadway is also to be improved at the same time by macadamizing to the extent of about 1,000 yds. The two items, however, will be let separately.

ALEXANDRIA, IND.—Local press reports state that bids for the construction of about 2½ miles of streets will be let soon. The cost of the work is estimated at $75,000.

CONNERSVILLE, IND.—Karl L. Hanson, Cy. Engr., writes us that at the last meeting of the council the ordinance providing for the cement sidewalk improvement was defeated. Consequently the contract for the work will not be let April 17, as previously advertised. There is a prospect, however, that a new ordinance for the work may be prepared soon.

FORT WAYNE, IND.—Bids are asked until April 3 for paving on Buchanan and Force Sts. A. M. Schmidt, Clk.

ANN ARBOR, MICH.—E. W. Groves, Cy. Engr., writes us that the city contemplates laying 16,500 sq. yds. of pavement this year.

GRAND RAPIDS, MICH.—Bids are asked until March 28 for repaving Cherry St. with sheet asphalt or concrete from Sheldon St. to Madison Ave.

TRAVERSE CITY, MICH.—Bids are asked until April 1 for a brick or asphalt pavement on Union and Front Sts. Chas. M. Beers, Cy. Clk.

PEORIA, ILL.—H. E. Beasley, Cy. Engr., writes us that ordinances for the improvement of Adams, Warner, St. James and University Sts. have been passed by the council.

MADISON, WIS.—Bids are asked until April 10 for grading, curbing and paving with crushed stone on ten streets. O. S. Norsman, Cy. Clk.

NEENAH, WIS.—The council has allowed a petition for macadam pavement on Main St.

OSHKOSH, WIS.—The board of public works has been authorized to advertise for bids for proposed brick and asphalt pavements. The cost of the work will be about $50,000.

RACINE, WIS.—Press reports state that the J. I. Case Threshing Machine Co., F. K. Bull, Pres., has offered to pave Ontario St. from Bridge to State St. with brick at an expenditure of $15,000. The company has also offered to pave part of St. Clair St.

SHEBOYGAN, WIS.—C. U. Boley, Cy. Engr., writes us that the board of public works will receive bids until April 7 for 11,434 sq. yds. macadam pavement, 190 sq. yds. brick crosswalks and 5,488 ft. combined curb and gutter.

NORTHCOTE, MINN.—This place has voted to issue bonds for $20,000 for improving roads and bridges.

DULUTH, MINN.—The following bids were received by the board of public works for improving 19th Ave.: Ordinary tar macadam, P. McDonnell, $24,274; Alex. Sang, $26,922; Zimmerman & Thomas, $26,374; Flitzgerald & Norris, $25,944; Hugo & Tims, $27,227; King & Steele, $26,466. Warren tar-macadam, King & Steele, $27,966; Fitzgerald & Norris, $28,341; P. McDonnell, $28,354; Hugo & Tims, $30,593; Zimmerman & Thomas, $28,414; Alex. Sang, $29,472.

ST. PAUL, MINN.—Bids for paving about seven blocks on Exchange St. with brick have been received as follows: Patrick Doherty, $22,000; James Forestal Co., $19,978; L. G. Washington, $20,435; Newman & Hoy, $20,150; Fielding & Shipley, $19,357. For paving on Decatur St. a distance of about four blocks the following bids were received: Patrick Doherty, $12,000; James Forestal Co., $11,149; L. G. Washington, $11,687; Newman & Hoy, $11,500; Fielding & Shipley, $11,184.

STILLWATER, MINN.—The council has decided to macadamize Main St., from Chestnut south.

ST. LOUIS, MO.—Bids are asked until April 17 for building vitrified brick roads, curbings, etc., at U. S. Clothing Depot. Lt.-Col. C. R. Barnett, Depot Q. M.

SALT LAKE CITY, UTAH.—Reports state that South Temple St. is to be paved with asphalt this season at a cost of about $200,000.

TORONTO, ONT.—Bids are asked until April 1 for repairs to asphalt pavements. O. A. Howland, Mayor.

WINNIPEG, MAN.—Notice has been given that the city intends to construct a granolithic walk on Pacific Ave., at a cost of $3,971. It is also proposed to macadamize Pembina St. at a cost of $14,635.

MANUFACTURING PLANTS.

CAMBRIDGE, MASS.—A brick factory building will be erected by the J. S. Bell Co. at Harvard and Sixth Sts. from plans by C. H. McClare, Arch. The proposed building will be four stories, 80 × 44 ft., and of mill construction.

HARTFORD, CONN.—Estimates will be wanted in a few days by Wilson Bros. & Co., Archs., Drexel Bldg., Philadelphia, Pa., for a 4-story factory for Pratt & Whitney Co., Hartford, to be of brick and iron, 80 × 300 ft.

NEW HAVEN, CONN.—E. A. Russell, Treas. Housatonic Co., Wallingford, writes that bids are wanted on the company's factory, and also equipment, to be built in this city. The buildings will be two stories, 464 × 50 ft., one story 75 × 50 ft. and one story 50 ft. square. They will be of brick and mill construction, costing about $75,000, and will be equipped with steam heat, two engines, generators and motors two or more. The company will manufacture hardware, elevators and complete sprinklers.

COLLEGE POINT, N. Y.—Plans have been prepared for the erection of a new factory for the Klimert Rubber Works at College Point. The building will be six stories high.

HOOSICK FALLS, N. Y.—The Noble & Johnston Machinery Mfg. Co.'s entire plant at this place was totally destroyed by fire on March 15, causing a loss estimated at $80,000.

CHESTER, PA.—The directors of the Tidewater Steel Co. have authorized C. E. Stafford to go ahead with the proposed improvements to the plant, to cost about $100,000. The improvements will include a blast furnace and two open-hearth furnaces.

JEANESVILLE, PA.—The Jeanesville Iron Works Co., whose plant is located at this place, has commissioned Hales & Ballinger, Archs., 1200 Chestnut St., Philadelphia, to draw plans for extensive additions to its pump works. The addition will consist principally of a new foundry building 100 ft. long and three stories high.

JOHNSTOWN, PA.—The Westinghouse Machine Co. has been awarded the contract for the steel work for the pattern shops and gray iron foundry to be located this spring at Trafford City, on the Pennsylvania R. R. James Stewart & Co. will construct the remainder of the buildings. The new plant, with equipment, will cost over $1,000,000.

PHILADELPHIA, PA.—The contract for a 5-story factory and office building at Columbia Ave., Bodine and American Sts. for the A. M. Collins Mfg. Co. has been let to B. Ketcham's Sons. It will be 120 × 128 ft., of brick, and will cost $90,000.——Plans have been submitted by Wm. Steele & Sons, Archs., Witherspoon Bldg., for a 4-story addition, 58 × 50 ft., to the Lehigh Mfg. Co.'s plant at Lehigh Ave. and Lawrence St., to cost $40,000.——The W. O. Wood Co., which recently bought ground at Ninth and Oxford Sts., will soon award the contract for erecting a 6-story factory building, 233 × 105 ft., to cost about $200,000; also on equipment. Wm. Steele & Sons, Archs.——The Frankford Hosiery Mills Co. will build a $500,000 plant on the site recently purchased at Unity St. and Asylum Pike, Frankford.

PITTSBURG, PA.—The United States Wire & Nail Co. is planning to extend its manufacturing facilities at Shoustown. Plans have been drawn for a billet mill to cost $500,000. The company contemplates an increase in the capital stock to $1,000,000 to provide for extensions and improvements to the plant. A force of 600 men will be employed.——Wm. W. Lawrence, Pres. W. W. Lawrence & Co., is having plans prepared for an 8-story paint and varnish factory to cost $150,000. The building will be 100 × 150 ft., and will be located at West Carson St.

SCRANTON, PA.—The Delaware, Lackawanna & Western R. R. will begin this spring the erection of car shops on the site of the North Mill of the Lackawanna Iron & Steel Co., to cost about $800,000.

SLATINGTON, PA.—Howard Weiss, Mt. Vernon Inn, Siegfried, is taking bids for a brewery in this place after plans by C. W. Leh, Arch., South Bethlehem. It will be a 3-story brick and iron structure, 64 × 94 ft., and fireproof in construction.

WILMINGTON, DEL.—Plans are now being prepared by Wm. C. Turber, Arch., 421 Chestnut St., Philadelphia, who will be ready for bids in about two weeks for a plant to consist of one 2-story building, 50 × 190 ft., one 1-story building, 50 x 100 ft., and a 1-story boiler house, 30 × 50 ft., all of slow-burning construction.

BALTIMORE, MD.—Chas. F. Cassell, Arch., Law Bldg., is taking bids until March 31 for a furniture warehouse in Lexington and Clay Sts. for Frank F. Murphy, 415 West Baltimore St., to cost $65,000. It will be six stories, 40 × 200 ft., and of slow-burning construction.——E. D. Preston, Arch., City Hall, is ready for bids for a warehouse and factory for the American Label Co., care Louis T. Weiss, Cross and Sander Sts., at the foot of Cross St. It will be of brick and iron, four stories, 60 × 100 ft. Bids for the power equipment will be taken by the owners.

FREDERICKSBURG, VA.—W. D. Williams, proprietor of the Williams Foundry & Machine Works, which were destroyed recently, has announced his intention of rebuilding the plant on a larger scale at the earliest possible time.

CHARLOTTE, N. C.—W. T. Rowland writes that he wants figures on a 15-ton ice plant complete, to be built by a stock company.

WHEELING, W. VA.—The promoters of the Riverside Bridge Co. have acquired the location of the proposed works and will shortly begin the erection of the plant. N. E. Whitaker is reported to be interested.——The West Virginia Bridge & Construction Co. has been organized and will build works at Glen Run, near this city, which will cost about $500,000. J. H. Barrett, Pres.

UNION POINT, GA.—The Greene County Oil Co., of Union Point, Ga., has received a charter, capitalized at $25,000, to erect at once a 40-ton cottonseed oil mill. Orders for portions of the equipment have already been placed. R. F. Bryan, Pres.; J. W. Griffin, Mgr.

BIRMINGHAM, ALA.—Wm. H. Morris and associates plan to establish a cold storage and refrigerating plant in this city, to represent an investment of $300,000. It will cover about one-half of a city block.

SHREVEPORT, LA.—The Sun Milling Co. has been organized, with a capital stock of $100,000, and will erect a plant costing that sum in this place. W. B. Newsonce, L. A. Scott and J. P. Crouch, Dallas, Tex., are interested.

KNOXVILLE, TENN.—The Virginia Bridge & Iron Co., Roanoke, Va., has secured the contract for erecting the three main buildings for the new plant of the Knoxville Iron Co. at Lonsdale. The buildings will be 396 × 80, 240 × 75 and 240 × 60 ft.

NILES, O.—The board of trade has closed a deal with Wade A. Taylor and associates whereby a new mill will be erected at once. The plant will employ about 200 men.

HAMMOND, IND.—The G. H. Hammond Co. has decided to abandon its packing plant at this place and to establish a new one at the Chicago Stock Yards, to employ about 3,000 men. The plant will cost $1,500,000.

INDIANAPOLIS, IND.—The John Deere Plow Co., a branch of Deere & Co., Moline, Ill., will erect a new building at a cost of $45,000. The building will be four stories, 133 × 72 ft.

GRAND RAPIDS, MICH.—The Mt. Pleasant Sugar Co. has awarded a contract to the National Construction Co., Detroit, for the erection of a 600-ton factory in Mt. Pleasant. The work will begin as soon as the weather permits and the plant be ready for operation by Oct. 1.

CHICAGO, ILL.—The Wireton Heating Co., of Blue Island, has secured a location for their plant in Chicago Heights. The new plant will comprise a foundry, 80 × 150 ft.; machine and tin shop, 50 × 250 ft.; pattern shop, 50 × 80 ft.; boiler and engine house, 50 × 80 ft., and a warehouse, 100 × 200 ft.——Alderman John J. Breiman contemplates the erection of a large factory building in Jackson Boulevard, between Morgan and Aberdeen Sts.——S. A. Treat, Arch., 279 Dearborn St., has made plans for a 3-story fireproof building, 96 × 157 ft., to be used for the Western Electric Co. on its new site at the river and Polk st. The total cost of the improvements will be $145,000.——The Illinois Car & Equipment Co. plans considerable additions to its plant at Hegewick, consisting of plants for malleable and gray iron. The improvements will cost $50,000.

MACOMB, ILL.—The Macomb Sewer Pipe Co. has decided to expend about $30,000 in the immediate overhauling of its plant, doubling the size of the main building and increasing the kiln capacity in a like manner. A car line will be built about two miles to the company's clay mines. The concern is now in the market for the purchase of the necessary lumber, roofing material, machinery, brick, light T-rails, pit and dump cars, kilns and kiln irons, trucks, dies, barrows, fans and drying apparatuses, clay screens, steam pipe, watchman clocks, time clocks and tools and appliances of all kinds used in the business.

MILWAUKEE, WIS.—The Central Beet Sugar Co. is contemplating the erection of another large plant similar to the one in operation at Menominee Falls. The site of the plant is not yet decided on, but it will be erected at either Kaukanna or Beaver Dam.

ST. LOUIS, MO.—Negotiations are under way for the complete remodeling of the soft wheat mill of the George P. Plant Milling Co., of St. Louis.

PORT ARTHUR, TEX.—Reports state that John W. Gates is negotiating for the purchase of a site in this place for the erection of an oil refinery with a daily capacity of 15,000 barrels. S. D. Cullinen is also interested. The company is known as the Texas Fuel Co.

COLORADO SPRINGS, COLO.—An enterprise is being promoted by the Franklin-Jones Realty Co. which will result in, if successful, the establishment of a brick-making industry in this city. A new dry process of brick-making will be used, in which no kilns will be required.

TORONTO, ONT.—Bids are asked until March 27 for the erection of branch works at Toronto Junction for Guerney Foundry Co. A. R. Denison, Arch., 20 King St., West.

MISCELLANEOUS CONTRACTS.

STONE CRUSHER.—East Douglas, R. I.—This town has appropriated $2,500 for a stone crusher.

WHARF.—Seattle, Wash.—The Roslyn Coal & Coke Co. has applied for permission to construct a new wharf near Clay St.

FIRE ENGINES.—Montreal, Que.—The sum of $15,000 has been passed by the board for the purchase of two fire engines.

STEAM HEATING PLANT.—Portland, Ind.—N. R. Griffith and B. G. Arthur have been granted a steam-heating franchise.

DREDGING.—Savannah, Ga.—We are informed that no bids whatever, were received at the U. S. Engineers' office, March 21 for dredging at Dobay Bar, Ga.

SMALL PARKS.—Chicago, Ill.—The question of a bond issue of $1,000,000 for the establishment of small parks is being considered by the park commissioners.

CHANNEL DEEPENING.—Newcastle, Me.—We are informed that the matter of deepening Georges River Channel will be considered at the March meeting.

TUNNEL.—Montreal, Que.—Application has been made for the incorporation of the Montreal Subway Co., to construct a subway under the St. Lawrence River.

PINE TIMBER.—Chicago, Ill.—Bids are asked until April 2 for all the Norway pine timber for use in Sections G and H of intercepting sewer. F. W. Blocki, Comr.

RETAINING WALL.—Rochester, N. Y.—City Engineer Fisher is preparing an estimate of cost of a retaining wall along the West river bank, as requested by the council.

DOCK.—St. Joseph, Mich.—Press reports state that the Big Four system, which has purchased dock property on St. Joseph River, will erect a large receiving dock there.

DOCK.—New York, N. Y.—The armory board has authorized an appropriation of $16,000 for erecting a dock for the use of Second Naval Brigade, at the foot of 55th St.

WHARF.—Santa Monica, Cal.—The contract for rebuilding the Ocean Park pleasure wharf has been let to J. C. Mercereau. The new pier will be 1,280 ft. long and 18 ft. wide.

TELEPHONE SYSTEM.—Buffalo, N. Y.—The Frontier Tel. Co. has completed plans for the installation of its central exchange and construction work is to be begun at once. A system of underground conduits will be used in

TRAMWAY.—Lewiston, Idaho.—The Kettenbach Co. and the Vollmer-Clearwater Grain Co., are to build a cable tramway from Pardee, Idaho, across the Clearwater River to Nez Perce Prairie. The river span is to be 600 ft., the longest span 1,200 ft., all down hill. Height, 2,067 and length, 8,660 ft. The tramway is for grain and general merchandise. Ernest McCullough, Engr., care D. W. Eaves, Lewiston, Idaho.

DRY DOCK.—Brooklyn, N. Y.—Plans for the new million dollar dry dock to be built at the Broklyn Navy Yard are reported as being nearly prepared, and bids are to be called for soon.

OCEAN PIER.—Palm Beach, Fla.—Bids will be received March 31 for a steel and cast-iron ocean pier at this place. Hildreth & Co., 32 Broadway, New York, are the consulting engineers.

STREET SIGNS.—Toledo, O.—A resolution has been before the council to provide for a vote at the coming election on a proposition to issue $25,000 bonds for the purpose of providing street signs.

DREDGING.—Buffalo, N. Y.—Francis G. Ward, Comr. Pub. Wks., in the estimates for his department has an item of $12,000 for dredging the Buffalo River and one of $7,500 for dredging City Ship Canal.

TELEPHONE IMPROVEMENTS.—Hartford, Conn.—Press reports state that the Southern New England Tel. Co. is planning to spend $2,000,000 in the current two years for new instalments and improvements.

CANAL.—Michigan.—The Cuyahoga Contracting Co., Port Huron, Mich., which obtained the contract for the construction of the canal from Lake Huron to Black River has recently filed articles of incorporation.

ADDRESSOGRAPH.—Cleveland, O.—Bids will be received by the clerk of the board of control, City Hall, until April 8, for an addressograph machine, as stated in our advertising columns. Chas. P. Salem, Dir. Pub. Wks.

IRRIGATION.—Helena, Mont.—A memorial is to be sent to the Secretary of the Interior asking for a survey of the Prickly Pear Valley for the erection of storage reservoirs for irrigation purposes. About 40,000 acres of land would be affected.

QUAY WALLS.—Mare Island, Cal.—Bids will be received at the bureau of yards and docks, Washington, D. C., until April 19, for the construction of two quay walls. The available appropriation is $55,000. M. T. Endicott, Ch. Bureau.

DREDGING.—East Rockaway, L. I.—Plans and specifications for dredging the creek have been prepared by D. S. Denton, C. E., and bids for doing the same will be received by Supervisor Smith Cox, at the town hall, Hempstead, until March 31.

DITCH.—Rockwell City, Ia.—The contract for making a 5.2 miles ditch in Lakes and Lake Creek townships has been let to the Interstate Drainage & Investment Co., Britt, Ia., at 98 cents per cu. yd. The total cost of the work will be about $10,000.

all streets of the downtown section of city.

DRY DOCK.—Portland, Ore.—Work on the new floating dry dock, the contract for which has been let, will be commenced in a few days. The contract provides that the dock shall have a lifting capacity of 10,000 tons, and shall admit vessels drawing 25 ft. of water.

DOCKS.—Pensacola, Fla.—A local press report states that the Louisville & Nashville R. R. Co. has had plans made for extensive improvements to their Central wharf property. Among other improvements will be double-trap coal chutes. Muskogee wharf will also be remodeled.

DREDGING.—Boston, Mass.—It is reported that the harbor and land commissioners have asked permission from Washington to dredge the harbor at the point where the steamship "Commonwealth" lately went aground. The specifications are already prepared and should permission be given the board hopes to receive bids by April 10.

TELEPHONE SERVICE.—Kansas City, Mo.—According to press reports the Missouri & Kansas Tel. Co. is to expend $1,000,000 this year in improving its system. Nearly half of this sum is to be spent in Kansas City where three new telephone exchange buildings are to be built. The company also intends to erect new exchanges in other cities, all of which will be fitted with new machinery.

FOREIGN CONTRACTS—EXPORT NEWS.

PUMPING ENGINES.—Manchester, Eng.—Bids are asked until April 19 for two sets of steam pumping engines. W. H. Talbot, Town Clk.

DOCK AND SEA WALL.—Jamaica.—Reports state that the Chamber of Commerce of Kingston, Jamaica, is urging the government to build a sea wall and dry-dock at Kingston.

ELECTRIC WORKS.—Georgetown, Penang, S. S.—Bids are asked until April 28 for erecting section 1 of an electric plant. Preece & Carden, Engrs., 8 Queen Anne's Gate, London, S. W., Eng.

AIR LIFT PLANTS, ETC.—Burnham-on-Crouch, Eng.—Bids are asked by E. Dilliway for an air-lift plant of 4,000 gallons capacity per hour and one of 6,000 gallons, both with a lift of 200 ft., and a 20-HP. boiler, etc.

PIER.—Spain.—Bids are asked by the Alquife Mines & Ry. Co., Ltd., Newmains, Scotland, until April 21 for a pier, etc., requiring 2,800 tons of steel, at Almeria, Spain. Formans & McCall, Engrs., 160 Hope St., Glasgow.

STREET RAILWAY.—Lima, Peru.—Reports state that an English syndicate has offered to purchase the tramways of Lima. It is reported that the sum offered was about $1,000,000. President Romana has just returned from a visit to the mining districts of Yauli.

RAILWAY.—Mexico.—A concession has been granted by the Mexican government to A. J. Peyton, an American, to build and operate a railroad between Acambaro and Morelia, Mex. It is stated that Mr. Peyton represents an American syndicate, which proposes to build several hundred miles of railway in Mexico, and that this concession is but the forerunner of other projects of the same nature which the syndicate has planned to undertake.

RAILWAYS.—Northern Nigeria, Africa.—Gen. Sir Frederick D. Lugard, High Comr. of Northern Ligeria, reports that the Legos Ry. has been built to Ibadan, a distance of 123 miles from the coast, and will be extended on to the Niger River, about 150 miles more. It is recommended that a line be built from Ibadan to Sapele instead of to the port of Lagos, where a bar will have to be removed at a cost of about $5,000,000. Other important railway work is recommended by the governor.

POWER PLANT.—Mexico.—A syndicate formed by F. S. Pearson, C. E., 621 Broadway, New York, in which New York, Boston and Montreal capitalists are interested, will construct a water power plant in the State of Puebla, Mex. The company will have $12,000,000 to $15,000,000 capital and develop water power to the extent of 40,000 to 50,000 HP. for use in Mexico and surrounding country. It is proposed to expend about $6,000,000 in gold in the undertaking. Surveys of the country have been completed and contracts closed.

PUBLIC WORKS.—Spain.—The municipality of Zaragoza, Spain, is asking for plans for one year from Feb. 1 for increasing the water supply of Zaragoza, a city with a population of 100,000. The prize for the accepted plan is $5,800.——Leonardo Alberto Monigatti has been granted a concession for a tramway from San Sebastian to Tolosa, Spain.——Bids are asked by the president of the Audiencia Territorial, Madrid, until March 29 for an electric plant in the Carcel Modelo. Upset price, $5,800.——The Sociedad Minas y Ferrocarril de Carreno has been granted a 99-year concession for a railway from Abono,

on the projected line from Vernia to Musel, to Candas, and branches to the iron mines.——Bids are asked until April 10 by the ministry of public works, Madrid, until April 10 for two iron bridges.

RAILWAY.—Persia.—U. S. Minister Griscom, at Teheran, Persia, reports that in view of the many inquiries received regarding the possibility of obtaining concessions for the construction and operation of railroads in Persia, he made the necessary inquiries and was informed of the existence of an agreement between the Persian and Russian governments giving to the latter the exclusive right to construct railroads in Persia for a period of ten years from the accession of the present Shah. This agreement has still seven years to run.

RAILWAY.—Mexico.—Reports state that the following is the route submitted to the government for the system from Mexico City to Kansas City, Mo.: From Mexico City to Tampico, Mex., as per the Honey concession for the Pachuca R. R.; from Tampico to the northern frontier, striking the Rio Grande north of Matamoras, and will be extended to San Antonio, Tex., from where direct connections will be had with Kansas City. It is generally believed that this road will be built, as the government is interested in developing the frontier between Nuevo Laredo and Matamoras, which contain rich agricultural lands. The concession is to be granted to the same people interested in the construction of the Pachuca R. R. and who will guarantee the performance of their contract by a forfeiture of the Pachuca concession.

ELECTRIC LIGHTING.—Nicaragua.—Press reports state that the steamer "Esther," especially chartered, left New Orleans March 18 for Greytown, Nicaragua, loaded with $75,000 worth of electrical equipment. The shipment is the first of an electrical enterprise embarked in by American capital. A company of electrical engineers and supply men has secured from the Nicaragua government a monopoly of the electrical lighting in four of the principal cities of Nicaragua. They are Managua, Lion, Masaya and Grenada. The plant at Managua, Zelaya's capital, will be lighted by a steam plant, which will be completed in eight months. In the Tippicata River, 60 miles from the route of the proposed Nicaragua Canal, there is a waterfall. This will be harnessed for water power, and will light all three of the other cities. The plant will be completed in three years, at a cost of several hundred thousand dollars. Long distance electrical distribution of the latest type will be employed in transmitting the electric current. The monopoly covers all forms of electric lighting, both public and private. The construction of the plants will be conducted by W. B. Reed, an engineer of New Orleans, and most of the capital invested will be from the state of Louisiana.

AMERICAN MACHINERY, ETC.—South Africa.—U. S. Consul Hollis, of Lourenco Marquez, under date of Jan. 27, says that he has received from Wilcken & Ackermann, of that city (branch house in Johannesburg), a request for American products. The house wishes to secure the agenry for steel lars, loromotives and other rolling stock, mining and electrical machinery, pitch pine, Oregon pine, etc., from the U. S. Mr. Ackermann, one of the partners, is on his way to the U. S. to arrange for these agencies. Mr. Hollis believes that a large trade in these lines can be created in southeast Africa, the Transvaal, Mozambique and adjoining states. The consul also remarks that U. S. firms sometimes make the mistake of giving the agency for Portuguese East Africa to a Natal house. This has been done recently in the case of a certain make of typewriters, to the serious detriment of the trade. He wishes to remind our exporters that Lourenco Marquez is not in South Africa; it is in Southeast Africa, and is the capital and chief port of Mozambique. There is nothing in common between Lourenco Marques and the British colonies; on the contrary, they are trade rivals, and freight rates from Durban, Natal, to Lourenco Marquez are nearly as heavy, taken in connection with the transshipment charges, as the total rates from N. Y. used to be. Mr. Hollis advises that local agents be appointed for all articles that it is desired to introduce into Mozambique, and that no reliance be placed upon sub-agents located in ports which are politically and economically widely separated from that province.

INDUSTRIAL NOTES.

THE CHICAGO PNEUMATIC TOOL CO., Chicago, will move its offices May 1 from the Monadnock Block to larger quarters in the Fisher Bldg.

THE ARTHUR FRITSCH FOUNDRY & MACHINE CO., St. Louis, Mo., is reported to have a contract for crushers for British Columbian parties.

THE RAWSON & MORRISON MFG. CO., Cambridgeport, Mass., has sold through its New York office, 22 hoisting engines for work on the Cadet Quarters building, Annapolis.

THE SHORT & WEATHERS PAVING & SUPPLY CO. has moved its plant from Seymour, Ind., to Paducah, Ky., where it will continue its contracting business and the manufacture of artificial stone, etc.

THE GREEN FUEL ECONOMIZER CO., Mattewan, N. Y., has orders for Green economizers for the new power house of the Boston & Worcester St. Ry. and for the new 4,000-HP. plant of the Benedict & Burnham Mfg. Co., Waterbury, Conn.

EXHIBITORS AT THE ANNUAL CONVENTION OF THE AMERICAN RAILWAY ENGINEERING & MAINTENANCE-OF-WAY ASSOCIATION AT CHICAGO:

F. E. ABBOTT, 1029 Rookery Bldg., Chicago.—Pressed steel bridge plate for rail joints.

ACHESON GRAPHITE CO., Niagara Falls, N. Y.—Graphite paints and graphite made from coal.

JOHN ALBRECHT, Massillon, O.—Patented design for steel ties.

AMERICAN NUT & BOLT FASTENER CO., Pittsburg, Pa.—Nut locks.

AMERICAN WASHER & MFG. CO., Newark, N. J.—Ward's rail joint and insulating joint, spring nut locks, etc.

AMERICAN STEEL & WIRE CO., Chicago.—Woven wire fencing.

AMERICAN TRACK BARROW CO., Lowell, Mass.—Wheelbarrow with grooved wheel to ride on the rail.

AVERY STAMPING CO., Cleveland, O.—Stamped steel tie-plates.

ATLAS RAILWAY SUPPLY CO., Chicago.—The Atlas rail joint.

ART METAL CONSTRUCTION CO., Jamestown, N. Y.—Samples of metal filing cases for drawings.

BONZANO RAIL JOINT CO., Philadelphia, Pa.—The Bonzano rail joint.

BUDA FOUNDRY & MFG. CO., Monadnock Block, Chicago.—Hand cars, track drills and the Bogue & Mills pneumatic gates for highway crossings.

DUNCAN BOND, Denver, Colo.—The American washer lock nut and Ward rail joints.

CAMBRIA STEEL CO., Philadelphia, Pa.—The "100 per cent" rail joint.

CHICAGO CROSSING CO., 1439 Monadnock Block, Chicago.—A spring fastener for track bolts.

CHISHOLM & MOORE MFG. CO., Cleveland.—Gage for spacing rail joints in track-laying.

CLIMAX STOCK GUARD CO., Fisher Bldg., Chicago.—Cattle guard of vitrified shale clay in blocks or sections, with longitudinal triangular ribs.

CONTINUOUS RAIL JOINT CO., Newark, N. J.—The Continuous rail joint.

DILWORTH, PORTER & CO., Pittsburg.—The Goldie spike, and Glendon and Goldie tie-plates.

DODSON SIGNAL LAMP & LANTERN CO., Scranton, Pa.—The Dodson lamp for signals, switchstands, etc.

DREXEL RAILWAY SUPPLY CO., Fisher Bldg., Chicago.—Switchstand and lumping post.

EDISON MFG. CO., New York and Chicago.—The Edison-Lalande battery for railway signal work.

ELLIOTT FROG & SWITCH CO., East St. Louis, Ill.—Switches and frogs.

EYELESS TOOL CO., New York.—Track tools and nut locks.

FAIRBANKS, MORSE & CO., Chicago.—Track tools, ballast loaders, coaling stations, water tanks, etc.

WM. GOLDIE, JR., & CO., Pittsburg, Pa.—Wooden plugs for filling spike holes in ties.

GOODWIN CAR CO., New York.—Model of the Goodwin dump car for ballasting and filling and for carrying coal and ore, etc.

HANDY CAR EQUIPMENT CO., Old Colony Bldg., Chicago.—The Snow car and locomotive replacing frog.

HOLMAN TRACKLAYER CO., Chicago.—The Holman tracklaying machine.

HUBBARD & CO., Pittsburg.—Track shovels, scoops, and track tools.

HUSSEY, BINNS & CO., Pittsburg.—Track shovels, spades, scoops, etc.

ILLINOIS MALLEABLE IRON CO., Chicago.—Swinging smokejack for roundhouses and rattler for cleaning boiler tubes.

ILLINOIS STEEL CO., Chicago.—The Bonzano rail joint.

INGERSOLL-SERGEANT DRILL CO., New York.—Air compressors, pneumatic tools for railway work, car jacks, wheel and axle hoists, hose press, etc.

O. W. JOHNSON, Oak Harbor, O.—Wrecking frogs.

JONES NATIONAL FENCE CO., Columbus, O.—Wire fencing.

KIMBALL, DOYLE & McWAIN (Pere Marquette R. R.), Detroit.—Concrete steel ties, now being tried on the Pere Marquette R. R.

KINNEAR MFG. CO., Columbus.—Rolling steel shutters and doors for freight houses, roundhouses, pier sheds, factories, office buildings, etc.

H. KURTZ & SON, Sac City, Ia.—Car moving device.

EDWARD LAAS, Elgin, Ill.—Anti-creeping device for rails, bolted to flange of rail and spiked against side of tie.

LIDGERWOOD MFG. CO., New York.—Hoisting engines and ballast unloaders.

LINK BELT MFG. CO., Chicago.—Coaling stations and their equipment; also the Renold silent chain gear for power transmission.

LUDLOW RAILWAY SUPPLY CO., Cleveland.—Rail joints.

LUDOWICI ROOFING TILE CO., Chicago.—Interlocking terra cotta tile for roofing stations, freight houses, shops, etc.

LUFKIN RULE CO., Saginaw, Mich.—Steel tapes and scales.

McKELVEY CONCRETE MACHINERY CO., Security Bldg., Chicago.—Model of rotary drum concrete mixer.

MacPHERSON SWITCH & FROG CO., Niagara Falls, N. Y.—Model of switch and frog leaving main track rails unbroken.

MERRILL-STEVENS MFG. CO., Kalamazoo, Mich.—Surface cattle guards with metal and wooden slats.

CHARLES MORRILL, 277 Broadway, New York.—The Pearson "cyclone" spike puller.

MORDEN FROG & CROSSING WORKS, Chicago.—Switches, switchstands and track jacks.

NATIONAL LOCK WASHER CO., Newark, N. J.—Nut locks.

OTTO GAS ENGINE WORKS, 360 Dearborn St., Chicago.—Water supply plants, gas engines, pumps, water columns.

OVERHOLT RAILWAY SIGNAL CO., Western Union Bldg., Chicago.—Train-order locking device by which the order blanks are locked up and inaccessible while the signal is at clear; signal at danger cannot be cleared until the order holder is replaced.

PAIGE IRON WORKS, Chicago.—Frogs and switches.

PENNSYLVANIA STEEL CO., Steelton, Pa.—Frogs, switches and switchstands.

POAGE MFG. CO., Cincinnati, O.—Water column.

RAILROAD SUPPLY CO., Chicago.—Tie-plates.

RAMAPO IRON WORKS, Hillburn, N. Y.—Switches, frogs and switchstands.

SCHERZER ROLLING LIFT BRIDGE CO., Chicago.—Photographs of bascule bridges.

SPIRITTINE CHEMICAL CO., Wilmington, N. C.—Wood preservatives and metallic paints.

CHARLES A. STICKNEY CO., St. Paul, Minn.—Gas engines for pumping and hoisting plants.

TAYLOR SIGNAL CO., Buffalo, N. Y.—Electrically operated signals, switches and interlocking plants.

TIFFANY ENAMELED BRICK CO., Momence, Ill.—Brick and tile for railway stations and buildings.

U. S. SUPPLY CO., Richmond, Va.—The Graham combination guard rail and frog brace.

VARIETY MFG. CO., 77 W. Lake St., Chicago.—Horizontal folding doors for freight houses.

WALLACE SUPPLY CO., 56 Fifth Ave., Chicago.—The Buckeye oil light; also apparatus for brazing, expanding tires, etc.

WATERBURY TOOL CO., Waterbury, Conn.—The Williams universal ratchet drill for use in confined places under machinery, etc.

WEBER RAILWAY JOINT MFG. CO., New York.—The Weber rail joint.

C. H. WHALL & CO., 170 Summer St., Boston.—Fiber for insulating joints in connection with track circuit signals.

CONTRACT PRICES.

WATER PIPE LINE.—Newark, N. J.—The street and water board received the following bids on March 20 for furnishing and laying a 60-in. water pipe line:

BIDS RECEIVED AT NEWARK, N.J., MARCH 20, 1902, FOR FURNISHING AND LAYING WATER PIPE.

Bids for Cast-Iron Pipe.

Quantities.		Norton, Kirk & Dalton, 215 W. 125th St., N. Y.	Stewart & Abbott, Times Bldg., New York.	T. A. Gillespie Co., 71 Broadway, New York.	Sandford & Harris Co., Hoboken, N. J.
60-in. pipe, 1½ ins. thick	9,600 lin. ft.	$22.00	$21.50	$21.42	$21.73
" " 1.7 " "	15,000 " "	24.70	23.50	23.20	24.00
" " 1.9 " "	1,900 " "	26.15	25.70	25.21	25.50
" " 2.1 " "	13,400 " "	28.15	28.00	27.00	28.00
16-in. cast-iron pipe	150 " "	1.15	1.15	1.15	1.21
12-in. " "	150 " "	1.10	.90	.87	.85
10-in. " "	850 " "	.80	.80	.67	.70
8-in. " "	600 " "	.80	.70	.53	.57
6-in. " "	400 " "	.80	.40	.46	.45
48-in. valves	3 each	1,292.00	1.150.00	1,230.00	1,219.00
42-in. "	1 "	926.20	750.00	820.00	835.00
24-in. "	12 "	236.50	185.00	205.00	208.50
20-in. "	24 "	170.50	115.00	135.00	133.00
16-in. "	8 "	80.00	80.00	96.00	94.00
12-in. "	6 "	45.30	46.00	55.00	54.00
10-in. "	12 "	38.60	40.00	33.00	35.00
8-in. "	10 "	27.40	29.00	25.00	24.00
8-in. air valves	11 "	58.30	69.00	100.00	170.00
Cast iron	30,000 lbs.	.03	.04	.05	.05
Structural steel	16,000 "	.04	.05	.05	.05¼
Concrete	850 cu. yds.	7.25	7.50	5.50	5.75
Rubble	100 " "	5.00	7.00	4.80	4.75
Brick masonry	150 " "	10.00	8.65	10.50	11.00
12-in. sewer pipe	500 lin. ft.	1.85	.55	.30	.78
8-in. " "	8,000 " "	1.20	.42	.47	.48
Earth excavation	5,000 cu. yds.	1.00	.62	.60	.65
Rock excavation	1,000 " "	3.00	2.30	1.50	1.50
Conduit		3,000.00	2,500.00	4,500.00	5,000.00
Total		$1,048,985	$1,015,510	$997,880	$1,027,900

Bids for Riveted Steel Pipes.

Quantities.		Carroll-Porter Boiler Tank Co., Pittsburg.	T. A. Gillespie Co., New York.	Stewart & Abbott, New York.	Sandford & Harris Co., Hoboken.
60-in. pipe, 5-16-in. thick	25,800 lin. ft.	$13.60	$13.25	$20.00	$13.50
" " ⅜-in. "	5,400 " "	15.00	14.20	21.00	14.50
" " 7-16-in. "	8,700 " "	17.12	15.00	22.00	17.10
16-in. cast-iron pipe	150 " "	1.15	1.15	1.15	1.21
12-in. " "	150 " "	1.10	.87	.90	.85
10-in. " "	850 " "	.82	.67	.80	.70
8-in. " "	600 " "	.82	.53	.70	.57
6-in. " "	400 " "	.82	.46	.40	.45
48-in. valves	3 each	1,500.00	1,230.00	1,150.00	1,219.00
42-in. "	1 "	1,000.00	820.00	755.00	835.00
24-in. "	12 "	250.00	205.00	185.00	208.50
20-in. "	24 "	160.00	135.00	115.00	133.00
16-in. "	8 "	120.00	96.00	80.00	94.00
12-in. "	6 "	68.00	55.00	46.00	54.00
10-in. "	12 "	40.00	33.00	40.00	35.00
8-in. "	10 "	30.00	25.00	29.00	24.00
10-in. air valves	6 "	175.00	140.00	350.00	170.00
8-in. air valves	7 "	125.00	100.00	260.00	150.00
Cast-iron	40,000 lbs.	.05	.05	.04	.05
Structural steel	22,000 "	.05	.05	.05	.05¼
Concrete	1,500 cu. yds.	7.25	5.50	7.50	5.75
Rubble	100 "	5.00	4.50	7.00	4.75
Brick masonry	150 " "	10.00	10.50	8.65	11.00
12-in. sewer pipe	500 lin. ft.	1.88	.80	.55	.78
8-in. sewer pipe	2,000 " "	1.20	.49	.42	.48
Earth excavation	5,000 cu. yds.	1.00	.60	.62	.65
Rock excavation	1,000 " "	3.00	1.50	2.30	1.50
Conduit		5.500.00	5,200.00	2,500.00	5,500.00
Total		$618,790	$580,919	$854,996	$607,981